Modern HOME and Gardening

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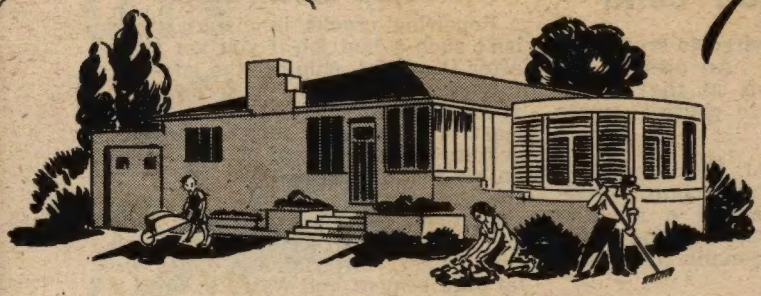
Select YOUR HOME

From America's Most Popular Designs

Ideas for WINDOW SHUTTERS



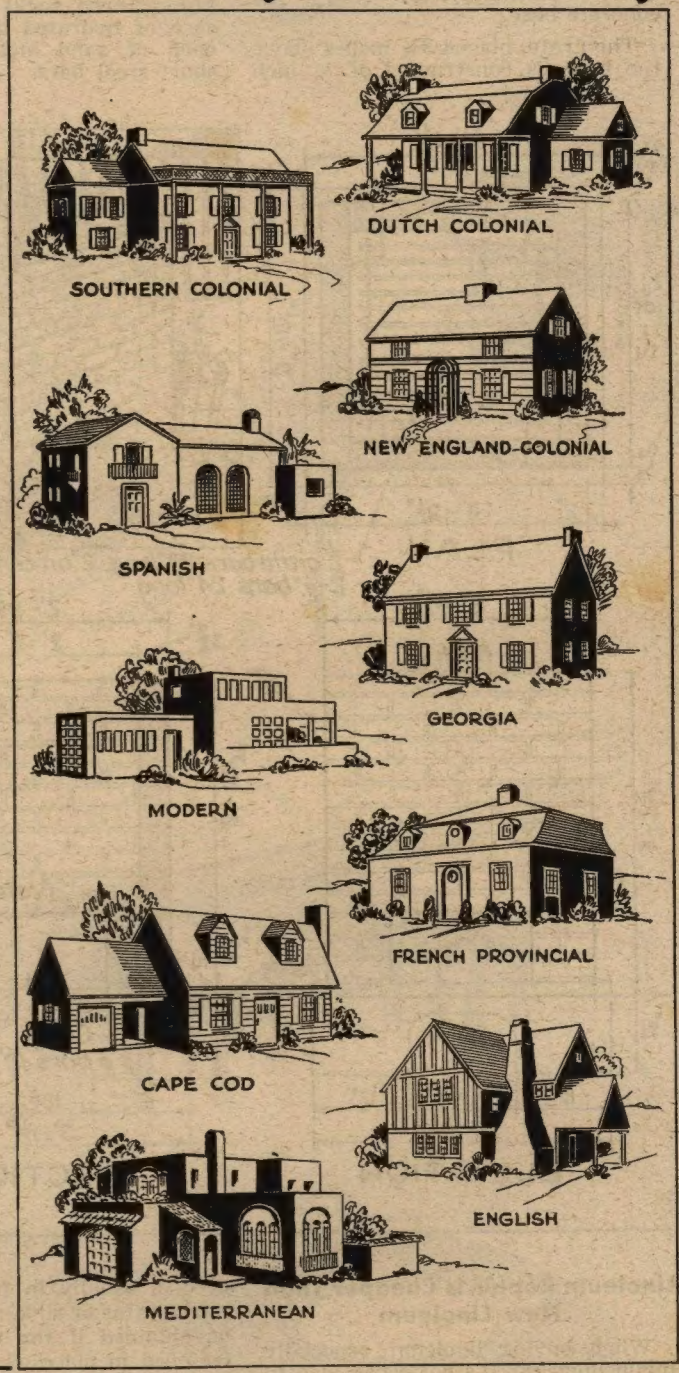
Modern HOME and Gardening

It's Easy...

to Identify Types of Architecture!

Sketches at the right show houses of different architectural types. Each has certain distinctive features. On the Southern Colonial home it's a two-story verandah and symmetrical arrangement. The Dutch Colonial type has a roof separated into two slopes of different pitches. Such houses appear low but have more room in the second story than is available with a single-pitch roof. A Spanish-type home may be identified by its rather low-pitched roof, usually covered with tile, and deep reveals at the openings which give the impression of very thick walls. And, there are frequently balconies with grillwork.

New England Colonial design features simplicity and well-balanced details. The windows are usually grouped around a main entrance in the center of the front. The "modern" home has no period precedents but creates a type of architecture entirely new in form. Georgian homes, as a general rule, have a front entrance in the exact center with the same number of windows on each side and second-story windows right over the first-floor windows. There are chimneys at both ends of the house. One chimney may be false, if but one is required to handle smoke from the cook stove or heating plant. French Provincial architecture includes a double-sloped roof, with the lower section curved outward at the bottom where the eaves overhang the main wall. Dormers on the second floor are usually found headed. A Cape Cod home has a rather steep roof with gable ends, double-hung windows containing a large number of panes, shutters and a large chimney. Dormer windows, where used, must be symmetrically arranged with respect to the front entrance. English architecture features half-timber work, low eaves and large chimneys. Mediterranean type of architecture is influenced by both Italian and Spanish design. Homes of this design are used in warm climates where shelter from hot rather than cold weather is required.



FLOYD MIX, Editor
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Inexpensive Trash Burner You Can Build

This trash burner, built of brick, which has a capacity of 11 cubic feet, is large enough to meet the requirements of any family.

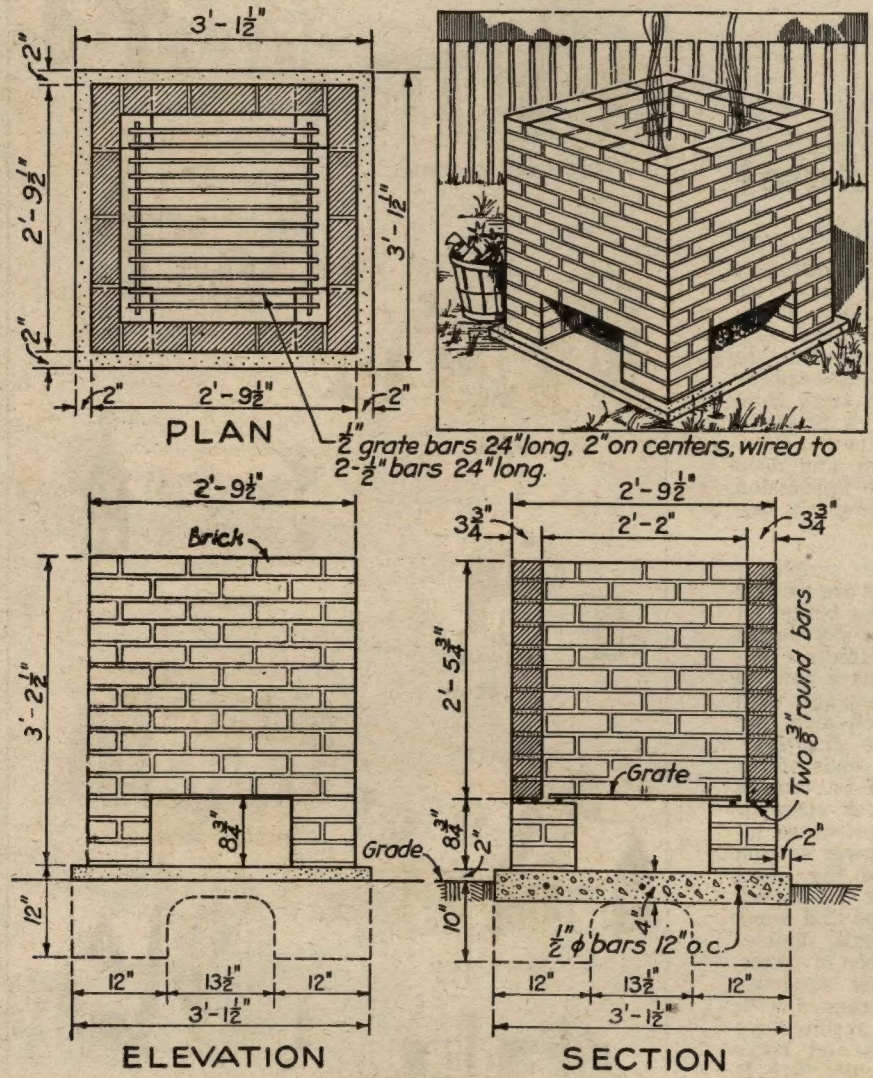
To reduce the cost, a chimney is not specified, but a screen of quarter inch mesh hardware cloth should be placed over the top to prevent the wind from scattering charred paper around the yard.

The burner measures 2 feet, 9½ inches by 2 feet, 9½ inches, and extends 3 feet, 2½ inches above the concrete base.

The grate, placed 8¾ inches above the base, is constructed of ½ inch round steel bars, wired to cross bars of the same size. An opening, 17 inches wide, is left at the bottom of each sidewall to provide ample draft.

The direction of the prevailing winds should be taken into consideration when selecting a site, so that smoke from the burning trash will not be objectionable to neighbors.

The materials list consists of 170 brick, three sacks of cement, one sack of hydrated lime, 6 cubic feet each of sand and gravel, and 25 short steel bars.



Linoleum Repair is Cheaper Than New Linoleum

When buying linoleum, especially inlaid linoleum, it's not a bad idea to get a little extra linoleum and felt base material—say a couple of square yards of each to have on hand for repairing. Sooner or later you're sure to need it. When a repair job is needed, usually in front of a stove, refrigerator or sink, a perfect fit may be obtained if the new linoleum is fastened in place over the old and a sharp knife used to cut through both thicknesses at the same time. The worn strip is removed, new felt base fitted into place and the new linoleum glued in place securely.

To Repair Cistern Cracks

Repairing cracks in cistern walls isn't such a bad job if you get right after it. First, chip off the edges of the cracks, using an old screwdriver or small cold chisel, until they are at least ⅛-inch wide. Next caulk with aokum (fibers obtained by untwisting an old hemp rope). The purpose of the caulking is to keep moisture on the outside from seeping in and loosening the cement before it has had time to set. After this is done, mix up pure cement and water to form a thick paste. Let this set a couple of hours to take up the initial shrinkage, while you are brushing all the dirt from the cracks, then remix without adding more water. Wet the surface, go right ahead and chuck the cement into the cracks, letting the mixture overlap an inch or so on each side. To prevent the cement from drying too fast, arrange a system of props to keep it covered with moistened burlap for two or three days. If this is impractical, sprinkle water on the surface every few hours for a day or so will be helpful.

The same general procedure is applicable when repairing cracks in concrete tanks, basement floors, etc.

Tips on Expansion Joints

It is not necessary to make expansion joints in the concrete floor of a house basement. When concrete is used for walks, driveways, roads, and other outdoor work of this type expansion joints are needed.

Keeping Boards from Warping

Warping of long boards can be prevented to a considerable extent by standing them on end or on one edge, so both sides are equally exposed to the weather.

How to Prevent Screen Stains

Copper screen wire lasts a long time but lots of people hesitate to use it because it stains white paint below the windows. This trouble can be prevented by giving the copper screen wire a coat of spar varnish, thinned with linseed oil and turpentine. The mixture should be about one-half spar varnish, one-fourth linseed oil and one-fourth turpentine. To apply it without clogging the screen mesh, use a regular screen painter, which can be picked up at almost any hardware store for a few cents.

Furnaces rust more in summer than in winter. You will add many years to the life of your boiler, if you will cover the grates with oil after the final fire of the winter has been cleaned out.

Formula for filling cracks in a newly scraped old floor: Melt glue in a double boiler, then add very fine sawdust to give it body, after which it may be colored to match the floor.

LET'S *Eat* in the KITCHEN

Attention of all housewives! Do you like to serve one or more meals per day, midnite snacks, etc. in the kitchen? Are you planning to build a new home or remodel your present home? If your answer to any one of these questions is "yes," here's a page of ideas on eating arrangements that should be clipped right away and added to your "new home" scrapbook.

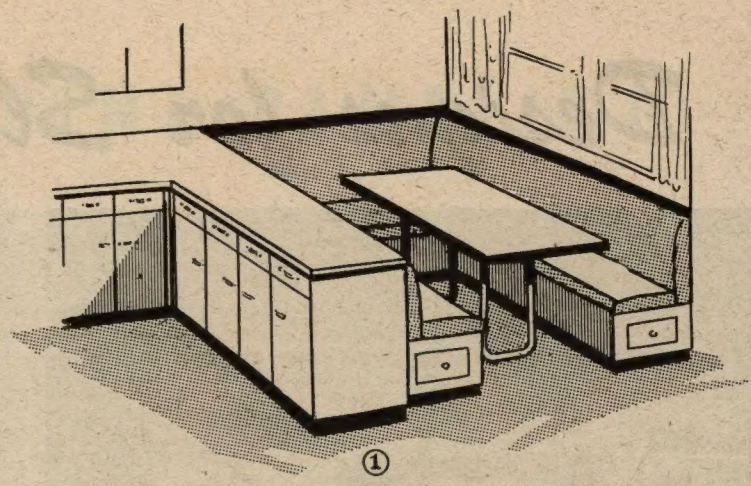
Figs. 1 and 5 show breakfast nooks with built-in seats. The seats should preferably be made in sections, in such a way that the cushions can be removed to gain access to storage space below the cushions.

In Fig. 2, we have a table which folds up into the wall when not in use, to cover dishes in a built-in cupboard.

Fig. 3 shows an idea for a portable snack table that may be pushed around and used almost anywhere. Breakfast bars are shown in Figs. 4 and 6. The bar in Fig. 6 is especially recommended in cases where space is at a premium, as the chairs slide under and flush against the counter when not in use.

Just which of these arrangements would serve your purpose best would be determined to a considerable extent by the amount of kitchen space which is available, how many members are in the family, and your personal preference.

Construction is not difficult and can be handled by any experienced carpenter with the help of a local upholstery shop, on jobs where upholstering is required.



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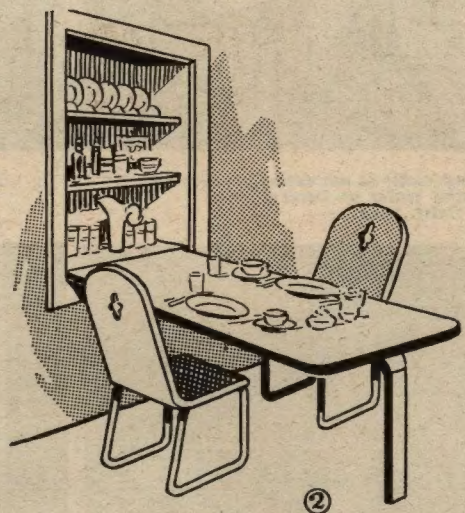

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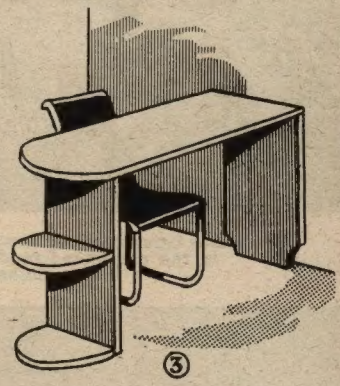

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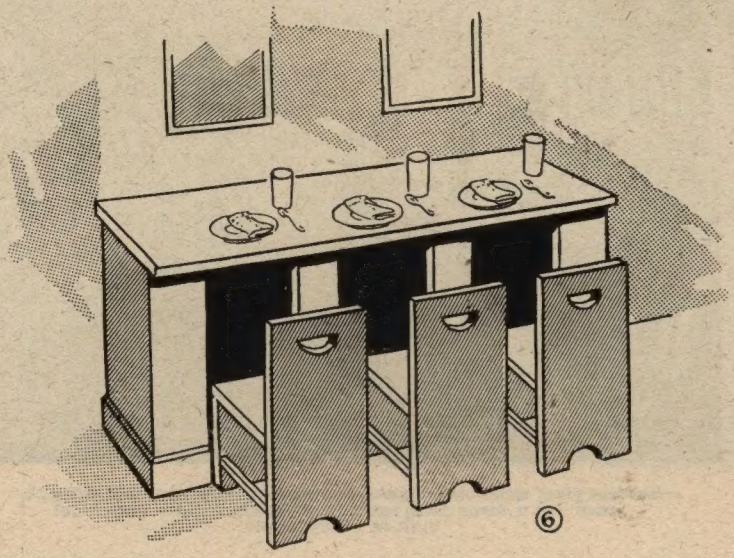

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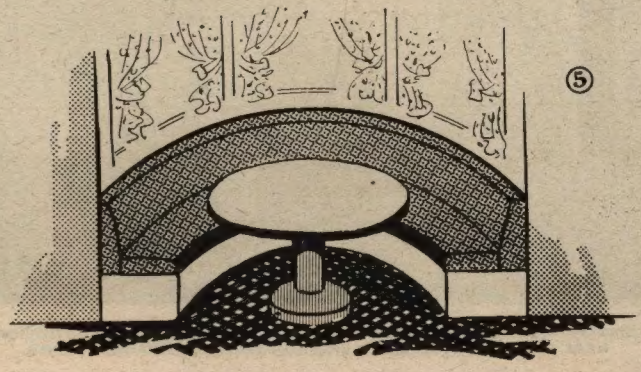

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Designs for Sleeping CREATED

A feminine version of the sea-going motif is attractively expressed in the end-to-end bunks and walls of knotty pine in a Balboa, Calif., home.

Corner bunks and walls of knotty pines takes on a bright, cheerful note with white-limey finish. The built-in bookshelves are handy and convenient.

Knotty pine walls and built-in cabinet with natural finish give charm to this comfortable bunk bedroom.

Masculine to the last detail is this remodeled California attic bedroom with its sturdy knotty pine furniture and pine-paneled walls. Cheerful, too.

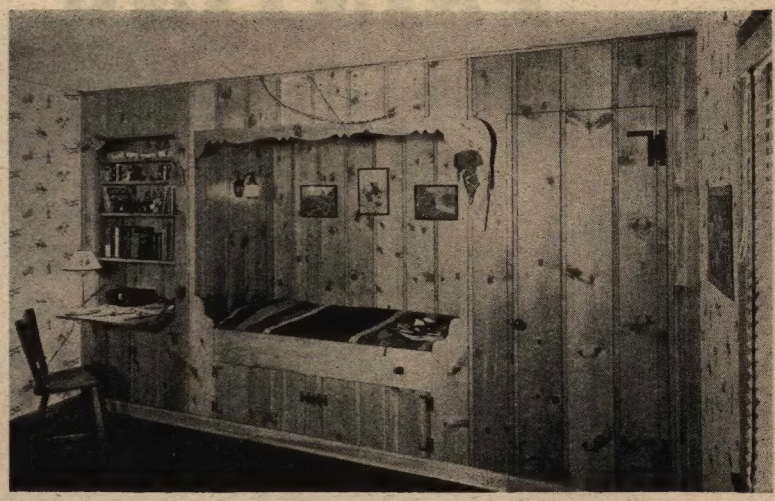
Smart refinement, plus simplicity, is achieved through vertical lines and enameled walls and woodwork of Western Pines.

Knotty pine walls and bunks accomplish efficient utilization of space for a large Oklahoma City family. Note individual built-in study desks.

COURTESY WESTERN

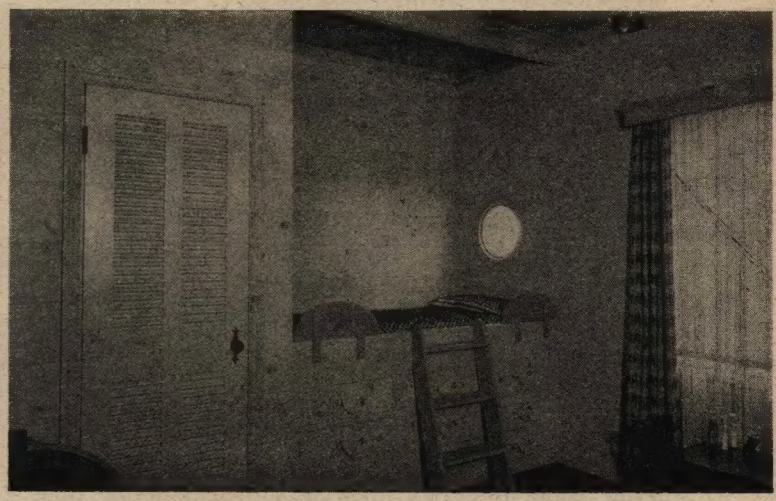
WITH WESTERN PINE PANELING

Contrasting effects are created by the practical bunks finished in limey-white and the golden-brown furniture of knotty pine.



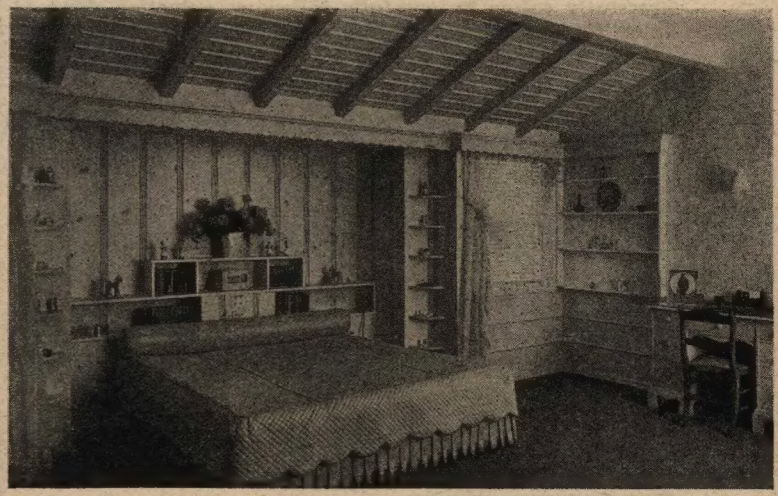
What boy wouldn't go for this good-looking, practical knotty pine built-in bunk, cabinet and desk?

Attic space converted into a useful bedroom. In this case the owner did the work himself.



Ample storage lockers, ladder, porthole and everything that smacks of the sea.

Restful and luxurious, is this comfortable Illinois bedroom paneled with friendly pines.



Sparkling freshness, decoration and utility were achieved with Ponderosa Pine painted white and knots rubbed out.

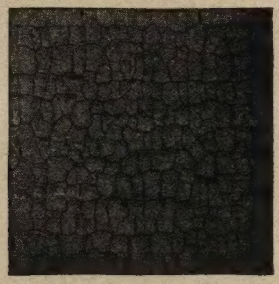
You Can Guard Against These
PAINTING TROUBLES

BLISTERING AND PEELING

CAUSE—Excessive moisture in the wood causes blisters which later rupture and peel.

PREVENTION—Before painting, see that the surface is thoroughly clean and dry, with no excess moisture on or in the wood or between plastering and siding. Caulk or putty any split siding, open joints around window and door-frame and at siding joints. If there is not free circulation of air between interior and exterior walls, blistering is almost certain to result because of moisture condensation.

ALLIGATORING



CAUSE—An aggravated form of checking with wide, long cracks extending almost to the wood, alligatoring is usually caused by applying hard-drying paint over soft-drying paint or by not allowing sufficient drying time between coats. Adding too much oil to finish coats of paint will also cause alligatoring.

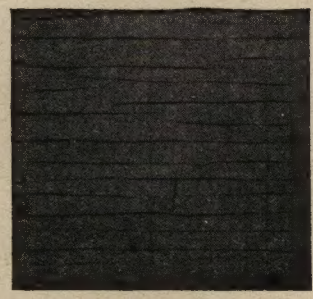
PREVENTION—Make coats from prime to finish progressively softer by carefully following reduction directions for each coat given on paint container. Allow plenty of drying time between coats.

SPOTTING

CAUSE—Spotting, which means loss of gloss or fading of color and early chalking in spots, is due to uneven absorption of oil from the finishing coat. This results from improper priming.

PREVENTION—Apply a primer that thoroughly seals the surface, thus equalizing the porosity of the surface.

CHECKING



CAUSE—A paint that checks excessively fails by scaling of the finish coat. This condition is usually caused by too soft an undercoat.

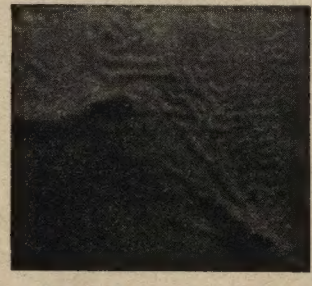
PREVENTION—Be sure to apply an undercoat of a formulation that will make it harder than the top coat and allow ample time for each coat to dry thoroughly before applying the next.

CRACKING AND SCALING

CAUSE—Cracking and scaling (one follows the other) are due to the use of low-grade paints which lack elasticity and become hard and brittle, instead of expanding and contracting with the wood.

PREVENTION—The only answer here is to choose a high quality paint which will retain its elasticity. Be sure to remove the old faulty material by wire brushing, scraping or burning.

OTHER TROUBLES



Use of paint which has been thinned with too much oil is likely to produce runs or sags. Sagging may also develop if a thin paint is applied to a cold surface which becomes warm before the paint film dries.

Courtesy GLIDDEN PAINT CO.

Builders' Terms and Definitions You Should Know

Becoming familiar with these terms will enable you to talk "carpenters' language" when discussing details of building construction or alteration:

Anchor.—Irons of special form used to fasten together timbers or masonry.

Balloon frame.—The lightest and most economical form of construction, in which the studding and corner posts are set up in continuous lengths from first-floor line or sill to the roof plate.

Baluster.—A small column used to support a rail.

Balustrade.—A row of balusters with the rails, generally used for porches, balconies, etc.

Band.—A low, flat molding.

Base.—The bottom of a column; the finish of a room at the junction of the walls and floor.

Batter board.—A temporary framework used to assist in locating the corners when laying out a foundation.

Beam.—An inclusive term for joists, girders, rafters, and purlins.

Bedding.—A filling of mortar, putty, or other substance in order to secure a firm bearing.

Belt course.—A horizontal board across or around a building, usually made of a flat member and a molding.

Bevel board (pitch board).—A board used in framing a roof or stairway to lay out bevels.

Board.—Lumber less than 2 inches thick.

Board foot.—The equivalent of a board 1 foot square and 1 inch thick.

Boarding in.—The process of nailing boards on the outside studding of a house.

Bracket.—A projecting support for a shelf or other structure.

Break joints.—To arrange joints so that they do not come directly under or over the joints of adjoining pieces, as in shingling, siding, etc.

Bridging.—Pieces fitted in pairs from the bottom of one floor joist to the top of adjacent joists, and crossed to distribute the floor load; sometimes pieces of width equal to the joist and fitted neatly between them.

Built-up timber.—A timber made of several pieces fastened together and forming one of larger dimension.

Carriages.—The supports of the steps and risers of a flight of stairs.

Casement.—A window in which the sash opens upon hinges.

Casing.—The trimming around a door or window opening, either outside or inside, or the finished lumber around a post or beam, etc.

Center-hung sash.—A sash hung on its centers so that it swings on a horizontal axis.

Chamfer.—A beveled surface cut upon the corner of a piece of wood.

Checks.—Splits or cracks in a board, ordinarily caused by seasoning.

Clapboards.—A special form of outside covering of a house; siding.

Combination frame.—A combination of the principal features of the full and balloon frames.

Conductors.—Pipes for conducting water from a roof to the ground or to a receptacle or drain; downspout.

Cornice.—The molded projection which finishes the top of the wall of a building.

Counterflashings.—Strips of metal used to prevent water from entering the top edge of the vertical side of a roof flashing; they also allow expansion and contraction without danger of breaking the flashing.

Drip.—The projection of a window sill or water table to allow the water to drain clear of the side of the house below it.

Fascia.—A flat member of a cornice or other finish, generally the board of the cornice to which the gutter is fastened.

Flashing.—The material used and the process of making watertight the roof intersections and other exposed places on the outside of the house.

Flush.—Adjacent surfaces even, or in same plane (with reference to two structural pieces).

Footing courses.—The bottom and heaviest courses of a piece of masonry.

Framing.—The rough timber structure of a building, including interior and exterior walls, floor, roof, and ceilings.

Furring.—Narrow strips of board nailed upon the walls and ceilings to form a straight surface upon which to lay the laths or other finish.

Gable.—The vertical triangular end of a building from the eaves to the apex of the roof.

Gambrel.—A symmetrical roof with two different pitches or slopes on each side.

Girder.—A timber used to support wall beams or joists.

Girt (ribband).—The horizontal member of the walls of a full or combination frame house which supports the floor joists or is flush with the top of the joists.

Ground.—A strip of wood assisting the plasterer in making a straight wall and in giving a place to which the finish of the room may be nailed.

Header.—A short joist supporting tail beams and framed between trimmer joists; the piece of stud or finish over an opening; a lintel.

Headroom.—The clear space between floor line and ceiling, as in a stairway.

Heel of a rafter.—The end or foot that rests on the wall plate.

(Continued on Page 8)

An Idea for Your "New Home" Scrap Book

These concrete steps have some definite advantages. The side curbing is flush with the sod, making it easy to mow the adjacent lawn. There are no corners to catch leaves and dirt. Snow removal is easier.

Hip roof.—A roof which slopes up toward the center from all sides, necessitating a hip rafter at each corner.

Jack rafter.—A short rafter framing between the wall plate and a hip rafter.

Jamb.—The side piece or post of an opening; sometimes applied to the doorframe.

Joists.—Timbers supporting the floor boards.

Laths.—Narrow strips to support plastering.

Lattice.—Crossed wood, iron plate, or bars.

Lintel (header).—The piece of construction or finish, stone, wood, or metal, which is over an opening; a header.

Lookout.—The end of a rafter, or the construction which projects beyond the sides of a house to support the eaves; also the projecting timbers at the gables which support the verge boards.

Louver.—A kind of window, generally in the peaks of gables and the tops of towers, provided with horizontal slots which exclude rain and snow and allow ventilation.

Matching, or tonguing and grooving.—The method used in cutting the edges of a board to make a tongue on one edge and a groove on the other.

Meeting rail.—The bottom rail of the upper sash, and the top rail of the lower sash of a double-hung window. Sometimes called the check rail.

Molding—Base.—The molding on the top of a base board.

Bed.—A molding used to cover the joint between the plancier and frieze; also used as a base molding upon heavy work, and sometimes as a member of a cornice.

Lip.—A molding with a lip which overlaps the piece against which the back of the molding rests.

Rake.—The cornice upon the gable edge of a pitch roof, the members of which are made to fit those of the molding of the horizontal eaves.

Picture.—A molding shaped to form a support for picture hooks, often placed at some distance from the ceiling upon the wall to form the lower edge of the frieze.

Mortise.—The hole which is to receive a tenon, or any hole cut into or through a piece by a chisel; generally of rectangular shape.

Mullion.—The construction between the openings of a window frame to accommodate two or more windows.

Muntin.—The vertical member between two panels of the same piece of panel work. The vertical sash-bars separating the different panes of glass.

Newel.—The principal post at the foot of a staircase; also the central support of a winding flight of stairs.

Nosing.—The part of a stair tread which projects over the riser, or any similar projection; a term applied to the rounded edge of a board.

Pilaster.—A portion of a square column, usually set within or against a wall.

Pitch.—Inclination or slope, as of roofs or stairs, or the rise divided by the span.

Pitch board.—A board sawed to the exact shape formed by the stair tread, riser, and slope of the stairs and used to lay out the carriage and stringers.

Plan.—A horizontal geometrical section of a building, showing the walls, doors, windows, stairs, chimneys, columns, etc.

Planks or lumber.—Material 2 or 3 inches thick and more than 4 inches wide, such as joists, flooring, etc.

Plaster.—A mixture of lime, hair, and sand, or of lime, cement, and sand, used to cover outside and inside wall surfaces.

Plate.—The top horizontal piece of the walls of a frame building upon which the roof rests.

Plate cut.—The cut in a rafter which rests upon the plate; sometimes called the seat cut.

Plumb cut.—Any cut made in a vertical plane; the vertical cut at the top end of a rafter.

Pulley stile.—The member of a window frame which contains the pulleys, and between which the edges of the sash slide.

Purlin.—A timber supporting several rafters at one or more points, or the roof sheeting directly.

Rafters, common.—Those which run square with the plate and extend to the ridge.

Cripple.—Those which cut between valley and hip rafters.

Hip.—Those extending from the

(*Continued on Page 9*)

Methods of Joining Baseboards at Corners

Fig. 1 shows the simplest method of joining the baseboard at corners. One piece is cut off to butt up squarely against the other. Fig. 2—This method of fitting the baseboard in interior corners is to be preferred over that illustrated in Figure 1 because, should shrinkage occur, it will at least be concealed in one direction. If nailed at the corners previous to putting in place, the two boards will usually hold their positions as indicated. Fig. 3—The method of rabbeting baseboards at interior corners is entirely satisfactory and should be followed in the best class of work. Fig. 4—Sometimes the interior corners of baseboards are mitered, but this method is not at all satisfactory because of the possibility of opening up and the consequent showing of the joint.

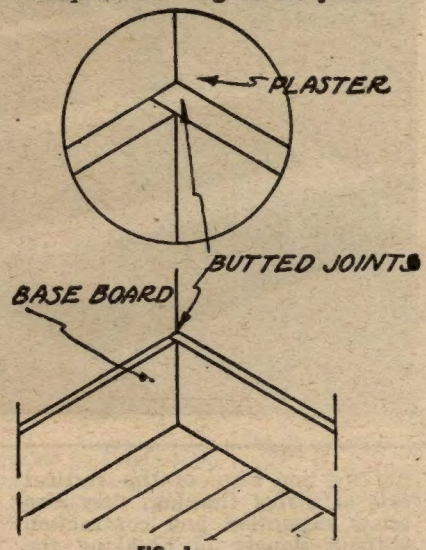


FIG. 1

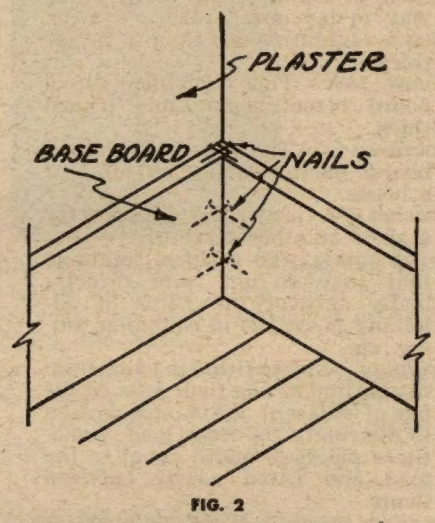


FIG. 2

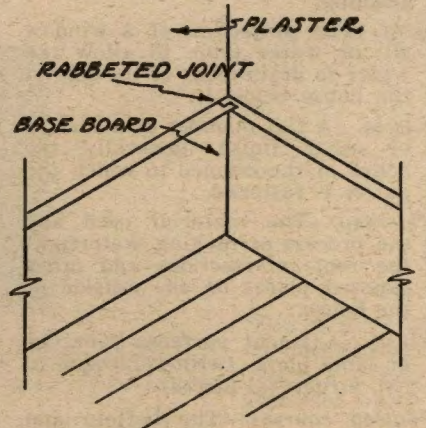


FIG. 3

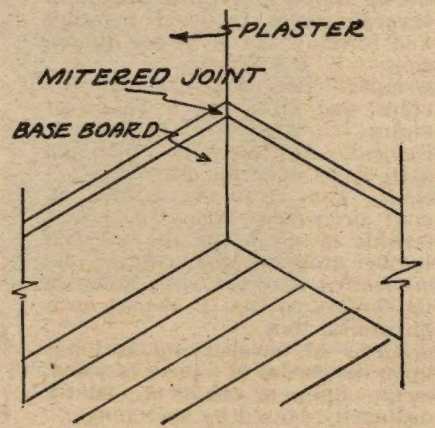


FIG. 4

outside angle of the plates toward the apex of the roof.

Jacks.—Those square with the plate and intersecting the hip rafter.

Valley.—Those extending from an inside angle of the plates toward the ridge or center line of the house.

Rail.—The horizontal members of a balustrade or panel work.

Rake.—The trim of a building extending in an oblique line, as rake dado or molding.

Ribband.—(See Ledger board.)

Ridge.—The top edge or corner formed by the intersection of two roof surfaces.

Rise.—The vertical distance through which anything rises, as the rise of a roof or stair.

Riser.—The vertical board between two treads of a flight of stairs.

Saddle board.—The finish of the ridge of a pitch-roof house. Sometimes called comb board.

Sash.—The framework which holds the glass in a window.

Sawing, plain.—Lumber sawed regardless of the grain, the log simply squared and sawed to the desired thickness; sometimes called slash or bastard sawed.

Scaffold or staging.—A temporary structure or platform enabling workmen to reach high places.

Scale.—A short measurement used as a proportionate part of a larger dimension. The scale of a drawing is expressed as ¼ inch = 1 foot.

Scantling.—Lumber with a cross section ranging from 2" x 4" to 4" x 4".

Scarfing.—A joint between two pieces of wood which allows them to be spliced lengthwise.

Scotia.—A hollow molding used as a part of a cornice, and often under the nosing of a stair tread.

Scribing.—The marking of a piece of wood to provide for the fitting of one of its surfaces to the irregular surface of another.

Seat cut or plate cut.—The cut at the bottom end of a rafter to allow it to fit upon the plate.

Seat of a rafter.—The horizontal cut upon the bottom end of a rafter which rests upon the top of the plate.

Section.—A drawing showing the kind, arrangement, and proportions of the various parts of a structure. It is assumed that the structure is cut by a plane, and the section is the view gained by looking in one direction.

Shakes.—Imperfections in timber caused during the growth of the tree by high winds or imperfect conditions of growth.

Sheathing.—Wall boards, roofing boards; generally applied to narrow boards laid with a space between them, according to the length of a shingle exposed to weather.

Siding.—The outside finish between the casings.

Sills.—The horizontal timbers of a house which either rest upon the masonry foundations or, in the absence of such, form the foundations.

Sizing.—Working material to the desired size; a coating of glue, shellac, or other substance applied to a surface to prepare it for painting or other method of finish.

Sleeper.—A timber laid on the ground to support a floor joist.

Span.—The distance between the bearings of a timber or arch.

Specifications.—The written or printed directions regarding the details of a building or other construction.

Square.—A tool used by mechanics to obtain accuracy; a term applied to a surface including 100 square feet.

Stairs, box.—Those built between walls, and usually with no support except the wall strings.

Standing finish.—Term applied to the finish of the openings and the base, and all other finish necessary for the inside of the house.

Stucco.—A fine plaster used for interior decoration and fine work, also for rough outside wall coverings.

Studding.—The framework of a partition or the wall of a house; usually referred to as 2 x 4's.

Threshold.—The beveled piece over which the door swings; sometimes called a carpet strip.

Timber.—Lumber with cross section over 4" x 6", such as posts, sills, and girders.

Tie beam (collar beam).—A beam so situated that it ties the principal rafters of a roof together and prevents them from thrusting the plate out of line.

Tin shingle.—A small piece of tin used in flashing and repairing a shingle roof.

To the weather.—A term applied to the projecting of shingles or siding beyond the course above.

Tread.—The horizontal part of a step.

Trim.—A term sometimes applied to outside or interior finished woodwork and the finish around openings.

Trimmer.—The beam or floor joist into which a header is framed.

Valley.—The internal angle formed by the two slopes of a roof.

Verge boards.—The boards which serve as the eaves finish on the gable end of a building.

Vestibule.—An entrance to a house; usually inclosed.

Wainscoting.—Matched boarding or panel work covering the lower portion of a wall.

Wash.—The slant upon a sill, capping, etc., to allow the water to run off easily.

Water table.—The finish at the bottom of a house which carries the water away from the foundation.

Wind ("i" pronounced as in kind).—A term used to describe the surface of a board when twisted (winding) or when resting upon two diagonally opposite corners, if laid upon a perfectly flat surface.

Wooden brick.—Piece of seasoned wood, made the size of a brick, and laid where it is necessary to provide a nailing space in masonry walls.

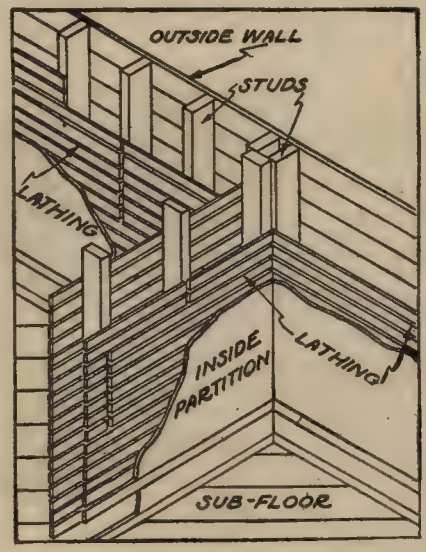
Handle on Wire Brush Makes Work Easier

Attaching a broom handle to a wire brush as shown will convert it into a handy cleaner for brick or painted walls.

Proper Way to Install Lath

In the selection of wood lath, obtain green material, if available. To prevent the possibility of cracking of plaster due to swelling of wood, lath should always be thoroughly wet before it is applied; otherwise the application of the wet plaster will cause the lath to absorb moisture and to expand enough to crack the plaster.

Lath should be spaced not less than ⅜ in. apart in order to allow the plasterer enough room through which to force the plaster to form a good "key," otherwise the plaster would be held in place merely by its adhesion to the surface of the lath. A space of ¼ in. should be left between ends of lath. No lath should extend from room to room, or be run over or behind any partition. Joints should be broken every sixth to eighth lath. Lath should be nailed over all studs, using 3-penny wire nails.



GLASS BLOCKS *Offer Many Opportunities to Dress Up Your Home*

First Aid for the dark kitchen! A row or two of Glass Blocks above the sink and work surfaces (Fig. 1) bring in daylight where you need it . . . and look very smart, too.

Floods of daylight enter your rooms when you have panels of Glass Blocks in exterior walls, as in Figs. 2 and 3. There are many attractive patterns to choose from.

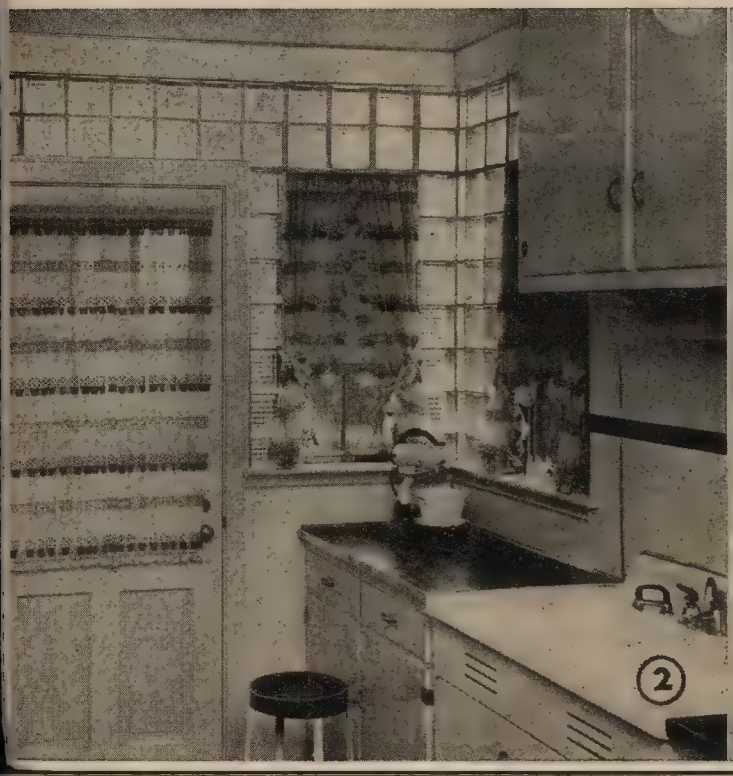
Glass Blocks bring in lots of light for the stairs, preserve your privacy, shut off unwanted views, and add to your home's beauty, Fig. 4.

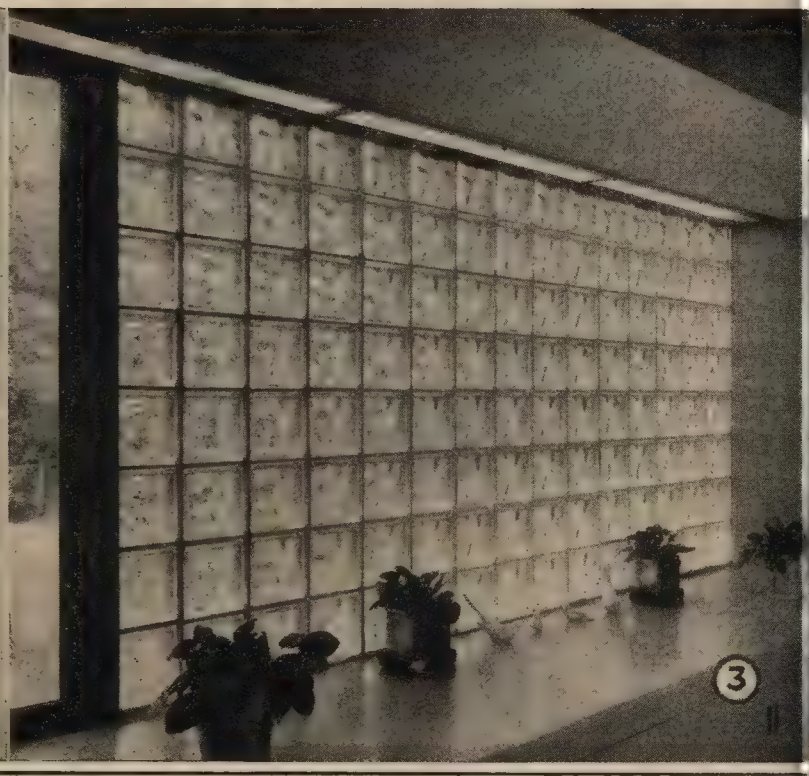
An entrance frame with glass blocks is as practical inside the house as it is good looking outside, Fig. 5.

If you want a tub partition in your bathroom that doesn't exclude the daylight, and still has character and good looks, try a smart, practical partition of Glass Blocks as shown in Fig. 6.

In Fig. 7, is shown a dining alcove de luxe! Panels of Glass Blocks invite the sunlight . . . and keep out curious eyes at the same time.

Courtesy PITTSBURGH PLATE GLASS CO.





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Selecting WALL PAPER *for* YOUR HOME

There is no great secret about selecting wall paper. But there are a few simple fundamental principles. By following them you won't qualify as a professional interior decorator. He has the expert knowledge that comes only from years of training and experience. But you will be able to decorate your home successfully—to achieve effects that will give you lasting pleasure and satisfaction.

PAPERS SHOULD BE RELATED

Think first of your house as a whole. Its interior is made up of a series of rooms related directly or indirectly to one another. The color schemes and designs must be pleasantly juxtaposed and must offer an interesting diversity of effect.

In most houses the relationship of first floor rooms or general living quarters must be far more carefully studied than that of bedrooms. Most general living quarters open directly into one another while most bedrooms are separated units opening from a common hallway. If you can stand in your living room and look through the hall into your dining room, you must think carefully about the colors and designs of wall papers in these three areas. Many people choose the easiest but uninspired method of papering all three rooms with the same neutral, unobtrusive wall paper. Nothing could be duller.

However, there are occasions when the living room and hall may be papered alike. If both rooms are small, and the opening between them large, it is advisable to treat them as one room in order to achieve an illusion of space.

Usually the living room is best papered in quiet colors and unobtrusive designs. For here you will have your best pictures, your best books with their colorful bindings; your furniture coverings will be diversified in tone and design, you will probably use summer slipcovers.

But quiet colors are not limited to ivory, cream, sand or gray. Green, pink, blue, yellow, red and brown are all available in quiet tones, and should be used with as great freedom as the more commonly accepted neutral tones. Stripes, plaids, diagonals, tapestries, medallions, scenics and fabric effects all make admirable backgrounds for living rooms.

The hall gives the first impression of a home. Therefore, it should say "Hello" in the friendliest possible manner. It should be much gayer and more decorative than the living room. Scenics, leaves, florals, bold stripes or gay checks are good choices.

Chief requisite for a dining room is that it be cheerful. Because there is little upholstery here—usually only chair seats, occasionally chair backs—the wall paper can properly employ strong color, good design and bold character. Florals, medallions, bold leafy forms, strongly colored conventional patterns, definite stripes and scenics are all excellent selections.

But don't use the same type of design for both dining room and hall; that would be unimaginative and would impair the effectiveness of both rooms. A good leaf in the hall and a bold stripe in the dining room, or a scenic in one and a gay floral in the other would be effective.

Suppose that living room, hall and dining room all open into one another. Assume we have selected a small conventional diagonal design in dusty pinks for the living room. Then for the hall choose a floral in pinks, blues and yellows on an off-white background, and for the dining room a conventional yellow leafy stripe on a gray blue base. A gray green line stripe in the living room might be complemented by a bold leafy design on a gray ground with top colors in green, brown and yellow in the hall, and a large off-white medallion on a yellow ground in the dining room.

This method of selection can best be described as choosing complementary designs and colors. One set of colors relates to the colors in the adjacent room and the design in one room sets off the design in the next. There is no monotony. This method is fundamental and essential to good decoration.

Treatment of bedrooms is different, for it is not usually necessary to choose papers that will set off and complement one another. The rooms can be regarded as units, not as parts of a whole. The main objective is variety of choice so that each room will have individuality.

If you have four bedrooms, a large floral design in one, a stripe, a small spot floral, and a quaint figure

TABLE FOR DETERMINING NUMBER OF SINGLE ROLLS OF PAPER REQUIRED FOR A ROOM

EXPLANATION—Look for height of ceiling at top of column, size of room in the left-hand column—in the angle will be found the number of single rolls required.
DEDUCTIONS—Deduct two single rolls of sidewall for every THREE ordinary-sized doors or windows.

Size of Room	Single Rolls of Wall					Yards of Border	Single Rolls of Ceiling
	8 Ft. Ceiling	9 Ft. Ceiling	10 Ft. Ceiling	11 Ft. Ceiling	12 Ft. Ceiling		
8 x 10	9	10	11	12	13	13	3
10 x 10	10	11	13	14	15	15	4
10 x 12	11	12	14	15	16	16	4
10 x 14	12	14	15	16	18	18	5
12 x 12	12	14	15	16	18	18	5
12 x 14	13	15	16	18	19	19	6
12 x 16	14	16	17	19	21	20	7
12 x 18	15	17	19	20	22	22	8
12 x 20	16	18	20	22	24	23	8
14 x 14	14	16	17	19	21	20	6
14 x 16	15	17	19	20	22	22	7
14 x 18	16	18	20	22	24	23	8
14 x 20	17	19	21	23	25	25	9
14 x 22	18	20	22	24	27	26	10
16 x 16	16	18	20	22	24	23	8
16 x 18	17	19	21	23	25	25	10
16 x 20	18	20	22	24	27	26	10
16 x 22	19	21	23	26	28	28	11
16 x 24	20	22	25	27	30	29	12
18 x 18	18	20	22	24	27	26	11
18 x 20	19	21	23	26	28	28	12
18 x 22	20	22	25	27	30	29	12
18 x 24	21	23	26	28	31	31	14

would give variety of design. To vary the color, use a blue background, a white, a dusty pink, and a soft green. Don't make the mistake of using the same design in three different colors in three different rooms for this would be monotonous.

So far we have considered the choice of paper from only one aspect, the relation of one room to another. Let us see now why we select a paper for a particular room.

CHOOSING COLOR AND PATTERN

Choice of color depends on two things: the color of the furnishings and the room's exposure. The important colors in the furnishings should be picked up as wall backgrounds if at all possible. If not, use contrasting colors.

Rooms with warm exposures—south, southeast, southwest—call for cool backgrounds such as green, blue and gray. Rooms with cold exposures need warm backgrounds, pinks, reds, yellows and browns. Rooms facing east or west get direct sunlight in either morning or afternoon and should be given the background color suitable to the room at the time of day it is most used. For instance, an east bedroom could well have a cool background, for the sun will be coming in when the occupant is getting up.

Choice of pattern depends on the patterns in the room's furnishings. It should set them off. If they are fairly simple, the wall paper pattern can be somewhat decorative. But if the furnishings have very decorative coverings, the wall paper pattern should be thoroughly simple.

TWO PAPERS IN ONE ROOM

What about using two different papers in the same room? We have heard a good deal about papering one or two walls in bold floral or leafy patterns and the other walls in plain tones or stripes. This is a type of modern treatment that can be badly handled; unless it is done with thought and reason, it comes under the category of tricks.

But a modern living room, with two walls almost entirely of glass, would be a logical place to use two papers. Here you could use a plain effect on the window walls in the background tone of the figured design on the other two walls. Or you might use a contrasting color on the plainer walls.

Perhaps one or more walls are so broken up with openings, fireplaces, bookshelves, cabinets or built-in furniture that there is not sufficient space properly to hang a figured paper. These walls could be plain and the others patterned.

Or you wish to use bold floral draperies at the windows. To be in good taste you should not hang such draperies against a flowered wall or a wall that has much design. Nevertheless, you feel that the wall opposite the windows also needs a strong pattern. Then choose a wall paper in the same spirit and colors as the draperies, hang it on the wall opposite the windows or on all three walls,

(Continued on Page 14)

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"UNCLE JOE'S" QUESTION BOX

Q *Is it advisable to drain a hot water heating system during the summer months?*

A No. Having the system filled with water does not result in excessive rusting. Removing the water may cause drying out of gaskets which would cause trouble when the system is put back into service.

Q *I want to put a new roof on my home. Some say the present shingle roof must be removed, others say to put the new roof right over the old roof. Which is correct?*

A Whether it is advisable to put a new roof over an old one depends mostly on the carrying capacity of the rafters. In cases where a roof is well supported by adequate rafters, it is generally advisable to put a new roof on right over the old one. It helps provide insulation.

Q *How does a water softener operate?*

A The most common type of water softener consists of cylinders filled with a product called zeolite, which is hydrated aluminum silicate. Zeolite has the ability to draw lime and magnesium compounds out of the water. When the zeolite becomes saturated it is rejuvenated by passing a saturated solution of common salt through the cylinder and used over again.

Q *I notice that at my neighbor's house the front concrete steps are sagging, which makes an unsightly crack between the house and the steps. How can this be prevented?*

A The surest way to provide sag-proof front steps is to let the basement foundation extend out under the steps to provide a substantial support for them. Concrete steps placed on a dirt fill are bound to sag.

Q *What can I do about tree roots in a drain?*

A The use of cast-iron soil pipe with leaded joints, instead of tile, will solve the problem. If you already have a tile drain and don't want to dig it up or move the tree that causes trouble, try running a strong solution of salt water down the drain about every couple of weeks. This will discourage the root growth in the tile.

Q *Which will give the most service—solid, veneer, or plywood furniture?*

A Plywood and veneer are both made by gluing layers of wood together so the grain of each layer runs at right angle to the next layer. This type wood has several advantages over solid wood. It is less likely to warp and split and allows the manufacturer to use higher-priced woods for the surface layer, without too great cost. One important consideration is to be sure that the patterns of the wood surfaces match perfectly.

Q *Nail holes in light woodwork which are filled with putty show. I'm refinishing the woodwork and wonder what can be done about them.*

A Use an ice pick to dig out the putty. Refill the holes with plastic wood the same color of the woodwork, which is available from almost any hardware store. Then go right ahead with the refinishing job.

Q *In moving into a new subdivision, how can we be sure that the basements are free from water?*

A Talk to those who own property in the vicinity of your proposed home. If a big rain happens to come while the deal is in progress, visit the place and make your own observations. Check with the village authorities to see that the sewer system is adequate—some parts of the subdivision may be better drained than others. If you still aren't satisfied, get a place in the same block with the village engineer. His home is probably located in the driest block in town.

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and do the window wall in a good plain tone or a simple design.

WHAT ABOUT THE WOODWORK?

A good general rule for the color of woodwork is to have it harmonize with the wall paper of the individual room. Nothing is more unimaginative or dull than to paint all the woodwork in a house white, off-white or ivory.

If you have a soft, blue wall, paint the woodwork a soft blue, either in the same tone or a shade or so lighter or darker. If the wall is white, have white woodwork. If you have a strong red or deep green or blue wall background, you will hardly want red or green or blue woodwork. You will find some interesting light top color in the wall paper that can be picked up for the woodwork. If the design of the wall paper is all in deep tones, you can arbitrarily paint the woodwork an off-white, a pleasant gray or a warm beige. Don't worry about the woodwork color in the adjacent rooms. If you have related your wall paper colors well, you may be sure that your woodwork colors also will harmonize.

NO HARD AND FAST RULES

There are no unbreakable rules in wall decoration. Skilled decorators will often put cool backgrounds in north rooms, warm backgrounds in south rooms and dark backgrounds in shaded dark rooms. But they are cleverly achieving unusual effects. However, it is not wise for amateurs to break rules. Professionals do it well. The amateur may do it badly.

But don't confuse habit with rules. You have heard a good deal about using small patterns in small rooms, large patterns in large rooms, stripes in low-ceilinged rooms, plain tones to make rooms appear larger, light ceiling tones to make ceilings look higher, and many other trite statements about wall decoration. How closely should they be followed?

Obviously, if you have a small room, a small pattern will scale well with its proportions. A tiny woman would hardly choose great floral patterns for the majority of her dress materials. But she may want a large scale print dress as a dashing extra for certain occasions.

So with room interiors. Your breakfast room may be small. It may also be in good proportion and have a plain carpet or linoleum floor plus simple all-wood furniture. You would like to make it a gay room. Therefore, it is perfectly logical to choose a fairly large floral paper with plenty of open background and hang it on the ceiling as well as the walls.

The same treatment can be applied to bathrooms, though not every design adapts itself to such use. The pattern should not have any set line of direction; this is why spot florals, all-over florals, leaves, plaids or set designs are good choices.

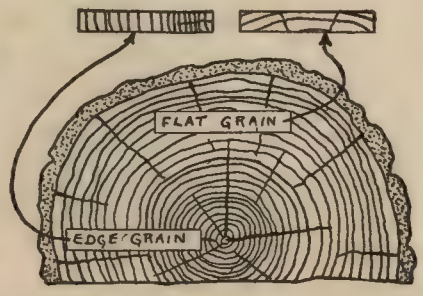
Powder rooms are excellent spots in which to use over-scaled designs. Large coat closets, small sewing rooms, writing rooms, rooms that have limited uses all fall into this category.

Conversely there are large rooms

(*Continued on Page 15*)

Classifying WOOD FLOORING

QUARTER AND PLAIN SAWED FLOORING.—Wood flooring is classified according to the method used in sawing it. When sawed from the logs perpendicular, or at an angle of not less than 45°, to the annual rings, it is classed as quarter-sawed, edge-grained, or vertical-grained. On the other hand, plain-sawed, flat-sawed, or flat-grained flooring is that which is sawed parallel to, or less than, an angle of 45° from the annual rings. Maple, birch, and beech are not concerned with the terms quarter-sawed or flat-sawed.



In general, it may be stated that flat-sawed softwood flooring should not be used for first-class work, although it may be used in a cheaper construction if paint or varnish is applied for a finish. It may be remembered here that the wearing quality of a floor for a definite species will be determined by the proportion of summer wood, the dark part of the annual ring.

In addition to its wearing quality, edge-grained flooring is less likely to open up because of moisture-changing conditions.

SPECIES AND GRADES.—Both hardwoods and softwoods are used for finish flooring above a subfloor. The grade and species used will depend upon the requirements and the price.

HARDWOODS. — *Oak.* — In all probability oak may be considered the most desirable hardwood flooring for residences. It can be secured in either quarter sawed or plain sawed, both in red and in white. Oak flooring is graded by quality for finish in six grades: First-grade quartered, first-grade sap, second-grade quartered, first-grade plain sawed, second-grade plain sawed, and third grade.

Maple, beech and birch.—For durability, maple probably will stand more rough usage than any other type of floor. Birch and beech are similar to maple, but even though pleasing in color and possibly less in cost, are not as wear resistant; and consequently are not used so frequently.

Maple, beech, and birch are provided in three standard grades—First grade, second grade, and third grade; the first grade being recommended for quality work; the second, where slight imperfections will not be objectionable; and the third, for factories and for a utility grade.

SOFTWOODS.—The list which is given below, suggested by the National Lumber Manufacturers' Association, specifies softwood species used in the manufacture of flooring.

It is customary to divide softwood flooring into select and common grades. The select grades designated by letters, "A," and "B and Better" are used when the purpose is to stain, varnish, or wax the floor to suit individual users, whereas the lower select grades, "C" and "D," are for floors to be heavily stained or painted.

No. 1 common and No. 2 common grades are used extensively for subfloors or in some cases for finish floors which are to stand rough usage.

In general, it may be stated that "B and Better" in the softwoods and first and second grades in the hardwoods are the grades ordinarily used.

SOFTWOOD SPECIES FOR FLOORING

Species	Flat-grained	Common grades [a]	Edge-grained
Cedar, incense	B and better, C, D.	No. 1, No. 2, No. 3	
Douglas fir, coast region [b]	do		A, B, C, and D
Douglas fir, inland empire and California [c]	do	No. 1, No. 2, No. 3	B and better, C, D
Fir, white	do	do	
Hemlock, eastern	D and better	do	
Hemlock, west coast	B and better, C, D		A, B, C, D
Larch, western	C and better, D	No. 1, No. 2, No. 3	C and better, D
Pine, longleaf and shortleaf—southern	A, B, C, D	No. 1, No. 2, No. 3 sheathing	A, B, C, D, No. 1, No. 2
Pine, North Carolina	B and better	do	B and better, No. 1,
Pine, northern white	D	No. 1, No. 2, No. 3	No. 2
Pine, Norway	do	do	
Redwood, California	Clear heart, A, B		Clear heart, A, B
Spruce, eastern	D	No. 1, No. 2, No. 3	
Spruce, Sitka	B and better		B and better
Tamarack	D and better, D	No. 1, No. 2, No. 3	

[a] The common grades are known as No. 1 common, No. 2 common, No. 3 common, or No. 3 common sheathing, and not simply as No. 1, No. 2, and No. 3 or No. 3 sheathing.

[b] Graded under rules of West Coast Lumbermen's Association.

[c] Graded under rules of Western Pine Manufacturers' Association, and California White and Sugar Pine Association.

where large patterns should not be used. Imagine a big bedroom with very broken wall spaces—doors, windows, a fireplace and chimney breast. If we attempted to use a large scale design, the pattern would be constantly interrupted. It would be better to use a small pattern which would adapt itself to the size of the wall spaces. Here is a simple rule: if a majority of the walls provide an opportunity to hang four or five breadths of paper without interruption, you can safely use a large design. If not, it is safer to use a small scaled design that will create an over-all effect.

The belief that stripes are good only in rooms with low ceilings is mistaken. To be sure, a series of perpendicular lines will give an illusion of height. But stripes also can be used in a high-ceilinged room if it is well proportioned. High ceilings are an asset and they can well afford to be emphasized.

MAKING ROOMS LOOK LARGER

Do plain tones make small rooms look larger? No. Cool, deep wall tones, blues and greens, with light color notes in the furnishings placed against them, will create an illusion of size. Hot, positive plain colors, yellows and reds, will give an atmosphere of intimacy by bringing the walls of the room together.

Add a good design in light top colors to a cool, deep background, and the illusion of size is enhanced. A spot medallion in soft grays and pinks on a deep blue backgound will literally add feet to the appearance of a small room. Broadly speaking, cool background colors make rooms look larger, warm background colors make them look smaller.

Light ceiling tones do not necessarily make ceilings look higher. For years people have thought that they do, but it just isn't so. If the ceiling is low, the less attention called to it the better. If you have chosen a sidewall paper with a pink background, for a low-ceilinged room, put a plain pink paper on the ceiling. Then the background color of the walls flow up onto the ceiling, making it a part of the room instead of a separate surface.

In rooms of normal or greater than normal height more freedom can be used in ceiling colors. The sidewall may be yellow with gray top colors, and a gray ceiling may be desirable to accent the top color in the sidewall. Or the sidewall might be soft green with yellow flowers; if you wish to use a yellow ceiling, it is perfectly proper.

In gabled rooms with slanting walls and dormer windows there is usually very little ceiling. In such cases it is advisable to choose a sidewall pattern that can be run right over the ceiling. The flat ceiling area is usually nothing more than a patch, and and it is a mistake to emphasize it by varying the design or color.

PATTERNS ON CEILINGS

There are times when ceilings should be decorated in gay patterns in conjunction with plain walls. If a ceiling has good height, the walls largely broken with windows and doors, the furniture covered in plain fabrics, and the carpet of plain material, you may well want to use a bold design in the room. The walls offer little space, and the windows are irregular in shape and there is little chance to introduce good design through draperies. The thing to do here is to put a gay, non-directional floral pattern on the ceiling, and an inconspicuous stripe or low tone on the walls.

Borders also can be used to make rooms a bit unusual. Use them to outline windows and doors or place them atop the baseboard when the walls are of the dotted or small checkered type, and an added note of gaiety is desirable. This, of course, is suggested only for informal rooms—cottage rooms, third floor rooms of the attic type, playrooms—it would not be suitable for a formal living or dining room.

Don't forget the closets. They should have character of their own, should add the same touch to a room that a well chosen necktie does to a suit. If the bedroom is papered in a gay floral, select one of the top colors and use it in a small spot, check or striped paper for the closet. If the room is papered in a stripe or a check or a dot, choose a gay floral in contrasting colors.

Courtesy of Wall Paper Institute

"Carry All" FOR HOME GARDENER

A cart such as this will find many uses around the garden. It may be used to carry tools and equipment and to move everything from peat moss to bushel baskets of tomatoes. It can be assembled from pieces of scrap boards found around the average home workshop or garage.

PAINTING KINKS

When laying a porch floor the floor boards should be given a coat of paint on the edges where the tongue and groove come together. This will help keep moisture which is bound to get into the cracks, from rotting the boards.

Screen wire can be painted without filling up the mesh if the paint is thinned with turpentine and it is put on with a brush having fairly stiff bristles.

If the oven of your kitchen stove is rusty on the inside, use steel wool to brighten the metal then give it a coat of aluminum paint.

Always following the instructions on the paint can. There's no necessity of experimenting—the manufacturer has already done that for you.

It's better to give a house two coats of paint every four years than one coat every couple of years.

If reputtying of the windows is required, do this before starting on the paint job, so the putty will be dry when you get to the windows with the paint.

When painting inside always have the room well ventilated. The paint will dry more rapidly.

HOT NEWS FOR

A LOT OF THINGS YOU SHOULD

Q *What are the principal types of insulation?*

A Thermal or heat insulation, sound insulation.

Q *May the same insulating materials be used for both?*

A In many cases the same material, if properly installed, will serve both purposes.

Q *In what forms is home insulation available?*

A Loose fill, Fig. 1; Batts, Fig. 2; Blanket, Fig. 3; Rigid Boards, Fig. 4; Reflectible (not illustrated).

Q *Of what materials are insulations made?*

A Raw materials from which insulation is made include: cork, cornstalks, cotton, asbestos, straw, gypsum, hair, jute, lead slag, limestone, paper pulp, sugar cane, wood, metal.

Q *How are the various forms of insulation used?*

A LOOSE FILL INSULATION

Loose fill insulation usually comes in one of three forms—granulated as with cork, fibrous as with mineral wool or powdered as with gypsum. It may be poured or blown into outside walls. In unfloored attics, it is poured between the joists and leveled off. In floored attics, the usual custom is to remove every third or fourth board and to pack the fill into place by hand.

BATT-TYPE INSULATION

Batt-type insulation, Fig. 2, is one of the simplest home insulations to install. If the attic is unfloored the batts are placed between the joists; in floored attics, the batts are generally tacked to wall studs and roof rafters.

BLANKET INSULATION

Blanket insulation usually consists of a layer of fibrous materials covered on both sides with paper or fabric. It may be cut to length with shears and is generally tacked in place between studs or rafters.

RIGID INSULATION

Rigid insulation is made by reducing wood, cane or other fiber to a pulp and reassembling the fiber into stiff sheets that may be sawed to size and nailed in place like lumber. The insulation value comes from the millions of tiny air spaces within and between the fibers. There are a number of ways in which rigid insulation is used, including: a substitute for wood sheathing, as a subfloor, interior surface of walls and ceilings, base for plaster, linoleum or wall paper. This type insulation should not be confused with ordinary wall board, which is usually more tightly compressed than insulating board.

REFLECTIVE INSULATION

Reflective insulation consists of a sheet of metal, foil, or other substance, which reflects heat, like a mirror reflects light. It should be installed in conjunction with an air space so the reflective surface is exposed.

Q *Will you name the points to be considered in judging insulation?*

A Insulation must be efficient. It should retard the flow of heat at a cost less than the cost of producing heat that would have been wasted without insulation. It must be permanent. It must be of low-heat capacity—a material that will not absorb heat and hold it for long periods of time. Insulation should be fire resistant. While insulation is not intended as a fire wall, it should be constructed of material that is fire resistant and will not support combustion. Insulation should be able to withstand wind, dust and moisture. It should offer resistance to decay, vermin and odors. Good insulation will not pack or settle, but stay in place indefinitely.

Q *About how much fuel can be saved by insulating a home?*

A Insulation can save home owners a substantial percentage of their fuel costs. In some cases the saving amounts to as much as 30% to 40%.

Q *Does insulation offer any advantages, other than saving in heating costs?*

A It helps maintain a more even temperature in the home and contributes to summer comfort—keeps heat in during the cold winter months and heat out during hot summer months.

Q *Will proper ventilation of an attic increase the efficiency of the insulation?*

A Insulation is not a perfect heat barrier. For this reason, an unventilated attic stores heat which is

COLD HOUSES

KNOW ABOUT INSULATION

usually dissipated downward, unless a means is provided for its escape. Cross ventilation is desirable and it may be obtained by the use of louvers as shown in Fig. 8. The louvers should be screened to keep out insects, and be provided with doors that may be closed during severe weather, or they may be of the type that close like shutters.

Q *Are storm windows and doors essential?*

A Storm windows and doors often pay for themselves within a reasonable time, in reduced fuel bills. Storm windows (Fig. 6) when properly installed, provide a dead-air space, reducing heat conduction to the outside, and preventing infiltration of cold air. They are particularly helpful in preventing frosting of windows, inasmuch as they protect the surface of inner panes from chilling winds which cause condensation and subsequent freezing. In cases where storm windows cannot be provided for all window openings, they should be provided for those on the side of the house facing prevailing winter winds. It's a good idea, too, to caulk around the frames, as in Fig. 5.

Q *Is there any way to insulate a wall to prevent "sweating"?*

A Dampness may appear on the inside surfaces of exterior walls as a result of other conditions than leakage through mortar joints or around window frames. Such dampness may be the result of condensation of moisture from the air in the room upon the cold surfaces of the plaster. It frequently develops by the same process as that which causes beads of moisture to form on the outside of a pitcher of ice water on a warm day.

It would seem that the natural solution to the problem would be first to reduce the amount of moisture in the air. It must be remembered, however, that a certain amount of moisture is necessary in a house from a health standpoint. For this reason, care must be taken not to make the air too dry. If reduction of moisture does not overcome the trouble, an attempt should be made to make the interior wall surfaces warmer by insulating them against the chilling effects of outside temperatures.

The simplest way to treat old walls to make them warmer and prevent "sweating" is to nail furring strips over the old plaster upon which to apply new lath and plaster, insulating board, or insulating material and wall board. Before the new surface is applied, it will probably be necessary to remove the trim and when the wall is finished, to insert pieces of wood behind the trim before it is replaced, to bring it forward to form a suitable offset. Another method is to leave the old trim in place and to apply new trim on top of this after plastering. Wall board or insulating board may be applied upon the stripping in place of lath and plaster, if desired.

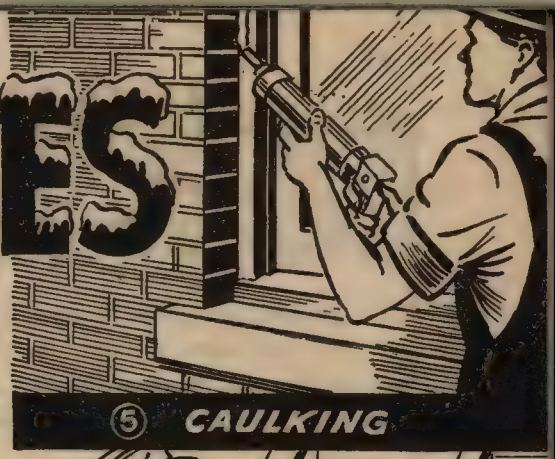
SOUND INSULATION

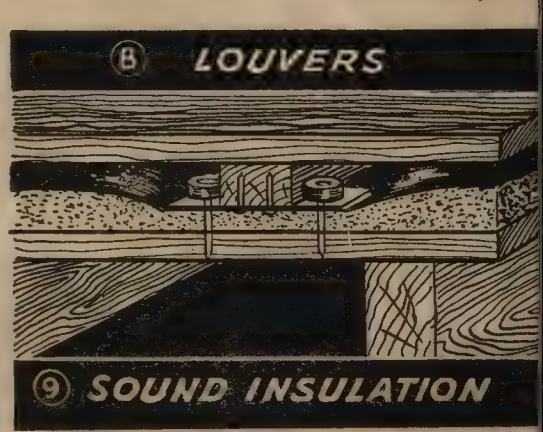
Q *Can you tell us something about the principal of sound insulation?*

A In discussing sound insulation, let's first find out a little about the physics of sound. When a heavy hammer is struck against an anvil, the air is pushed away in all directions, causing waves known as sound which spread in ever enlarging circles. Pitch of sound depends on the number of waves which strike the ear drum per second. Sound travels in buildings by conduction through materials of high density, by diaphragm action. Partitions and floors are set in motion, transmitting energy to the air on the other side. To retard or stop this motion, we need a soft material such as felt, asbestos, etc., which tend to absorb sound like a sponge absorbs water. And, the efficiency of the insulation depends not only on the material used, but also on the method of installation. The fewer the points at which units are fastened together and the smaller the number of rigid connections, the more efficient the sound insulation. Fig. 9 shows a method of installing a floor in which there is no direct contact with the sub-floor. The sub-floor is covered with balsam wool sound insulation. A nailing strip for the main floor is fastened to a flexible steel clip which in turn is anchored to the sub-floor by nails fitted with felt washers, eliminating direct metallic contact.

Q *Will the weight of a wall have much bearing on its sound-insulating qualities?*

A Yes, the more a wall weighs, per cubic foot, the more efficient sound insulation it provides.





HOW To Antique

Antiquing makes a newly-painted object appear old and mellow, brings out the beauty of carvings and mouldings and softens or tones down highly decorated surfaces. It also helps conceal painting imperfections.

Painted furniture that has been antiqued will harmonize perfectly with the most sophisticated types of natural finish furniture (mahogany, walnut, etc.) in even the most formal of rooms.

IT'S EASY To antique a painted object you merely brush an antique glaze all over the surface to be antiqued—then wipe most of it off except a trace at the edges and that which naturally remains in depressions.

STEP BY STEP INSTRUCTIONS

All you need is a tube of Du Pont Oil Color, Duco Clear (Varnish) and turpentine.

ANTIQUE GLAZE RECIPE

1 Tablespoonful Duco Clear
3 Tablespoonfuls Turpentine
1½ Teaspoonfuls Oil Color—Raw Turkey Umber

Add Oil Color Black for a darker antique.

This quantity is enough to antique a small table.

Measure the turpentine into a small glass or can. Add the Oil Color —then mix with a paint brush. Last, add the Duco Clear and stir together. Add more or less Oil Color for a deeper or lighter antique.

Antique White, Ivory and light colors with Raw Turkey Umber Oil Color. Raw Sienna makes a redder glaze. Antique dark hues of red, green, blue, etc., with Lamp Black Oil Color.

Antiquing is simple. After a little experimenting there will no longer be any mystery to what appears to be a skilled and enviable accomplishment. Be sure the painted surface is thoroughly dry and hard. Place old newspapers under objects to keep glaze from floor or table. On small objects brush glaze over entire surface—then wipe immediately. On large objects, such as a bureau, antique a section at a time, completing each drawer front, side and top separately.

Brush the antique glaze onto the surface, and into all depressions (See Fig. 1). With a dry cloth wipe the glaze immediately as though you planned to wipe off most of it. (See Fig. 2). If necessary, use a dry brush to "pick up" any puddles from depressions by brushing lightly. Then wipe surface again with a clean cloth to restore "highlights." To make "highlights" lighter, dampen a small cloth with turpentine—then hold it over a finger and wipe off the high spots of projecting surfaces.

On flat surfaces such as table tops, brush on the glaze, then, with a circular motion, partially wipe off the glaze from the middle leaving a small amount at the edges. Blend the darker glaze (at the edges) toward the center. Do this by patting the surface with a clean piece of cheese cloth held crumpled in the hand. Complete blending with a dry brush, brushing lightly over the surface, from the center toward the edges and back again. If the result doesn't suit you, apply the glaze all over again and repeat the antiquing process. If you prefer, clean off all the glaze with a cloth dampened with turpentine and start again.

On large surfaces the glaze may set up too quickly for easy blending. Add a few drops of linseed oil to the glaze to slow up the drying and facilitate blending.

After the glaze is thoroughly dry, apply a coat of Duco Clear (glossy or dull) to assure that none of the antique glaze rubs off on clothes.

PEASANT ANTIQUING

Antiquing may be done very casually leaving streaks and irregularities in the finished glaze or great care may be taken to obtain a perfectly blended effect.

Both treatments are used on formal as well as informal pieces.

From a traditional viewpoint, Provincial furniture and objects decorated in the Peter Hunt manner should be antiqued casually. It is enough merely to brush on the glaze and *wipe* it off with a rag—blending with a brush isn't necessary.

FRENCH ANTIQUING

On French period furniture the glaze is blended uniformly from dark to light (Fig. 3). Blending with a brush is necessary in order to obtain a perfect gradation of the glaze.

Courtesy Du Pont Co.

Fig. 1. Brush On

Fig. 2. Wipe Off

Fig. 3. Blend with a brush for French Antiquing

Fix-it Yourself

Cleaning Smoked Brick

A strong trisodium phosphate solution is useful in cleaning brick fireplaces that are smoked. Use with a scrub brush and then thoroughly rinse the brick.

Soap Prevents Door Sticking

When a house door sticks in damp weather due to swelling, rub a piece of bar soap on the spot where it binds. If this does not help try sandpapering the area.

Fill Cracks in Floor Before Sanding

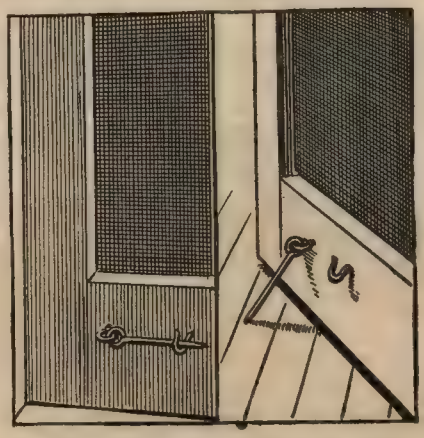
If you want to fill the cracks in a floor in preparation for sanding and finishing here is an excellent method: To a thin mix of Casco Grade A Glue a sufficient amount of fine sawdust is added to make the mixture thin enough to flow easily from an oil can with a spout cut short. Clean out the cracks and squirt in enough mixture so that it will round off a little higher than the floor to allow for shrinkage. When dry, the floor can be sanded and finished in the usual way.

Removing Grease Spots from Wallpaper

Place a blotter over a grease spot on wallpaper and iron over the spot with a warm iron. The heat will cause the blotter to absorb much of the grease thus removing it from the paper.

Stop for Garage Door

A couple of eye bolts and a piece of ½-inch rod are all the items you need to make this garage or porch screen door stop. The rod rests on the open eye bolt when not serving as a prop to hold the door open.



Clothesline Prop Won't Slip

A clothesline prop with an old harness snap fastened on the top will not slip off the clothesline. Fasten the snap to the prop with a couple of staples.

Using Water Paint on Hard-to-Cover Walls

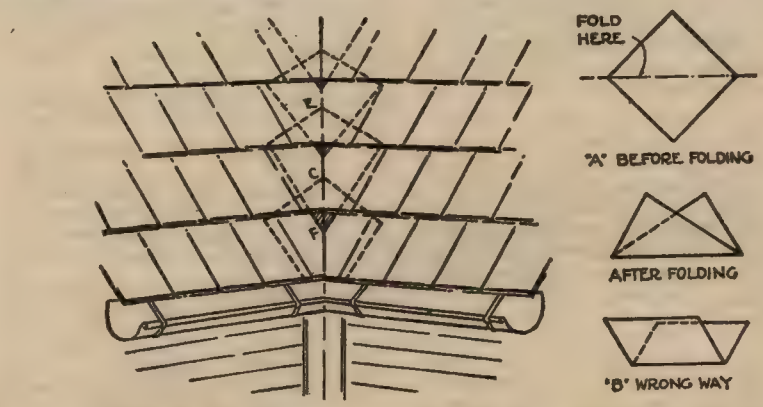
In applying two coats of water-mix paint to wall paper that a single coat wouldn't cover in good shape, one home owner proceeded as follows: Using a roller applicator, the first coat was put on with up and down strokes leaving very small spaces between paint strips. The second coat was put on crosswise or horizontal to the floor, the skipped spaces in the first coat serving as guides. After the job has been finished the left over paint may be used to complete the color scheme by painting the window shades. It will brighten up discolored or faded shades and help to light up a dull room.

Making Posts Last Longer

Posts used for lawn and garden fences can be made to last longer by coating them with a mixture of Portland cement 1 part, fine sharp sand 3 parts, with sufficient water added to bring the mass to a creamy consistency. Brush on two coats of the mixture, allowing plenty of time for drying between coats. This mixture not only protects posts from moisture but also from the attacks of insects.

Repairing Leaky Roof Flashing

The sketch "A" above shows a good way to fold metal strips when repairing leaky flashing in a closed valley covered with shingles. Sketch "B" shows the wrong way. Nails that interfere too much may be cut off, using a sharp chisel, and later replaced.



Frosted Windows for Privacy

To give your bathroom or basement windows a frosted effect—for more privacy, use a mixture of epsom salts and varnish. Apply the mixture to the window with a cloth or brush.

Tape Prevents Scratches

To prevent bed casters from making marks on the hardwood floors remove the casters and cover the rollers with strips of adhesive tape.

Repairing Dents in Woodwork

Dents in woodwork can sometimes be removed by soaking the areas around the dent with warm water. This causes the wood fibres to expand and tends to make the wood return to its normal shape.

Safety Measure

Cellar steps that have a white stripe painted lengthwise along the edge are easy to see and reduce the likelihood of missteps.

Can You Use Some EXTRA MONEY?

We will pay from $2.00 to $5.00 for each short cut or time-saver of interest to home owners, that can be used in this publication. Send 100 to 200-word articles, along with simple sketches or photos, to: Editor, Modern Home & Gardening, 115 E. Eighth St., Topeka, Kansas.

Payment will be made immediately upon acceptance and unavailable material returned promptly, if stamped return envelope accompanies contribution.

Comparison of Heating With Coal and With Oil

In comparing the cost of heating with oil and with coal, all factors must be considered. There is greater opportunity for poor firing with coal than with oil, because the personal element enters to a much greater degree with the coal fire. It is safe to say that only a small percentage of householders operate coal-heating plants to best advantage, principally because of poor room-temperature control. With the coal fire there is overheating during the milder periods of the heating season, especially when no automatic room-temperature control is used. Temperature regulation is frequently achieved by opening windows and doors, rather than by control of fire. These things greatly lower the seasonal plant efficiency.

The average temperature maintained inside the house affects fuel consumption to a much greater degree than is generally understood. In Washington, D. C., for example, nearly one-fifth more fuel is required to heat a house to 75° F. than to 70°. About 7 percent more fuel is needed to heat to 72° than is required to heat to 70°. It is not recommended that abnormally low temperatures be carried for saving fuel, but it is well to realize that overheating a house only a few degrees can cause a large increase in fuel consumption as well as produce an uncomfortable and possibly unhealthful condition.

Where coal is burned, some auxiliary heating devices such as portable oil, gas, or electric heaters may be put into service in the mild early and late heating periods. The cost of operating these should be included in the cost of heating with coal, when making comparison with oil heating.

With an oil burner properly installed and regulated, the personal element is largely removed. An oil burner may be operated earlier in the fall and later in the spring than a coal heater because of the ease of starting, and because presumably a minimum of care is required afterwards. The room temperature, with a good automatic oil-burning installation, is maintained practically constant at any ordinarily desired temperature, which is not commonly the case with the coal burner.

It should be borne in mind that the usual oil-burning installation is merely a change over from coal burning to oil without any radical change in the boiler. There are many types of boilers in use, and some are far more suitable for oil burning than others. A definite comparison between the costs of heating with oil and with coal for any particular case would require consideration of the type and size of the boiler, the care given the operation of the coal-burning plant, and the prices for the different kinds of fuel, even with a burner selected as suitable for the boiler used.

The Department of Agriculture found, in studies of the comparative consumptions of coal and of oil in small round boilers, such as would be found in an average dwelling house, that 1 short ton of coal hand-fired, may be the equivalent of from 150 to 200 gallons of oil fuel. (Stoker-fired or other special coal-burning furnaces are commonly more efficient than ordinary coal-burning heaters.) This large range in equivalents is due to a great variation in the efficiencies of different boilers, and to a great difference in the control of temperature. The higher figures apply where the boiler is not well suited for oil burning, and the lower figures where conditions for burning oil are very favorable or where the coal-burning boiler is replaced by a sudden oil-burning type.

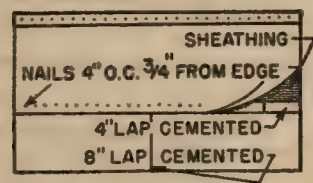
By estimating the oil-coal equivalent and applying local fuel prices, an approximation of the relative costs of fuel may be computed for any particula rcase. Interest and depreciation on the burner-installation cost must be included in the cost of heating with oil, and for a small installation this charge may equal a considerable portion of the fuel cost. The cost of auxiliary power, electricity, gas, or both—may be $1 or more per month; the amount varies greatly with burner types and with utility prices. After the free-service period, which generally lasts 1 year, service charges must be reckoned with unless service is included in the price of the oil. With good burners, properly installedK, service charges should be small.

Against the greater cost of heating with oil, may be set the cost of employing an attendant for the plant, often required fo ra coal furnace, but unnecessary when oil is used. It is claimed also that with a properly adjusted oil burner the cost of cleaning and redecorating the home is greatly lessened.

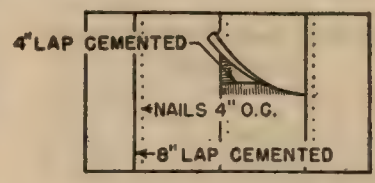
U. S. Dept. of Agriculture, Circular 406.

PROPER INSTALLATION OF ROLL ROOFING

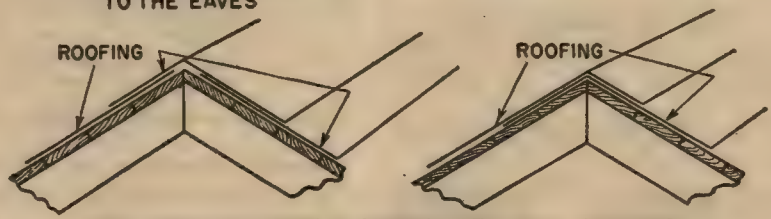
Roll roofing should be used only on roofs sheathed solidly, using special nails with large heads. Nails are placed along the edges, usually 3 to 4 in. on centers. Edges of the roofing should be lapped about 4 in.—the exact amount depends on the slope of the roof, and roofing cement used between the two surfaces. The roofing may be laid parallel, either to the eaves or to the slope, and applied to any roof having a slope greater than 2 in. per foot. Figures 1 to 5, inclusive, give several suggestions for using wooden strips to fasten roofing at the eaves and at rake or gable ends.



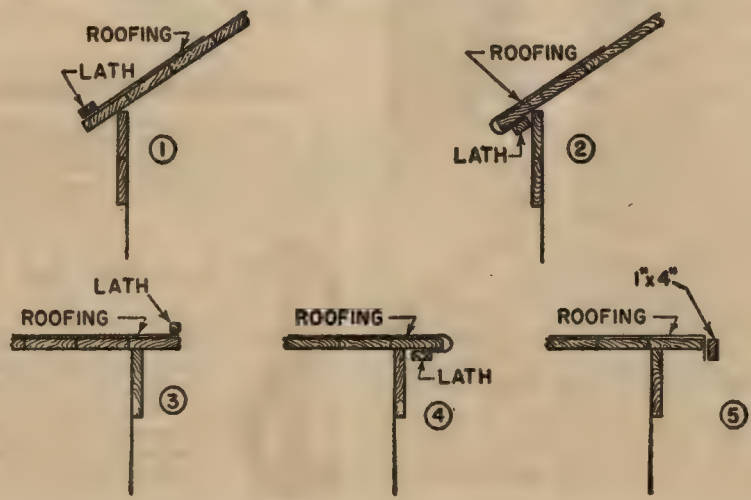
ROLL ROOFING LAID PARALLEL TO THE EAVES



ROLL ROOFING LAID WITH SLOPE



TWO TYPES OF RIDGE FLASHING WITH ROLL ROOFING



LIME HINTS *for the Home*

Lime for Lawns

Lawn grass, like other crops, requires a good, fertile soil, well-balanced in the several factors that produce maximum plant growth. One of the most important of these factors, and one that is often overlooked, is soil acidity. This condition is caused by the leaching away of the lime from the top-soil, and also by the continued use of some otherwise excellent fertilizing materials that leave an acid residue. Lime corrects soil acidity efficiently and economically.

When making a lawn it is advisable first to determine the degree of acidity of the soil. If only slightly acid or neutral, no lime may be required. If medium acid, 50 pounds of hydrated lime (or equivalent in other liming material) should be applied per 1,000 square feet, and if strongly acid, 75 pounds to 100 pounds per 1,000 square feet will be found desirable. The two most popular lawn grasses, Kentucky bluegrass and white clover, will not tolerate a high degree of acidity and invariably grow best on well limed soils. Some of the other grasses are not as sensitive to soil acidity, but their thrift is usually impaired when the soil becomes very acid.

On an established lawn it is well to make a moderate lime application of 30 to 60 pounds per thousand square feet every four or five years. This will keep the soil acidity in check and permit the lawn fertilizers to function efficiently.

Whitewash

Hand in hand with attractive home surroundings goes a regular use of whitewash. Stones, trellises, arbors, fences, poultry houses, outbuildings, basements, and other structures, are materially improved in appearance if kept clean and white with this inexpensive preparation.

Many home owners use a simple mixture of hydrated or lump lime, common salt, and water. The usual proportions are 1½ pounds of salt to 5 pounds of hydrated or 4 pounds of lump lime (slaked into a paste), adding sufficient water to produce the desired consistency. This is applied with a brush or sprayer. Although inexpensive and easy to prepare, this mixture may rub or chalk off.

Where a durable, non-rubbing whitewash is wanted the following mixture is recommended: Soak 5 pounds of casein * in 2 gallons of hot water until thoroughly softened. Dissolve 3 pounds of trisodium phosphate * in 1 gallon of water and add to the casein. Allow this mixture to dissolve. Prepare a thick cream by mixing 50 pounds of hydrated lime (or the putty made from 38 pounds of lump lime) in about 7 gallons of water, stirring vigorously. Slowly mix the lime paste and casein solution. Dissolve 3 pints of formaldehyde * in 3 gallons of water and slowly add to the batch, stirring constantly and vigorously. Care must be taken not to add the formaldehyde too rapidly or the mixture may jell. Do not make up more of this formula than can be used in one day.

Composting

When composting leaves, sod, manure, garbage and other materials, the use of a mixture composed of 2 parts of lime, 2 parts superphosphate and 1 part ammonium sulphate, will hasten the decaying process and result in a better product. About 10 pounds of this mixture added to 100 pounds of the material to be composted will be sufficient.

Sanitation and Deodorant

Lime is used effectively to reduce odors and promote a more sanitary condition in foul smelling and damp, filthy places such as sewers, drains, outhouses, garbage cans, poultry houses, stable floors and animal kennels. First clean away all dirt and debris, then sprinkle sufficient lime over the area to completely whiten it. Lime is an excellent accessory on auto camping trips and around summer camps.

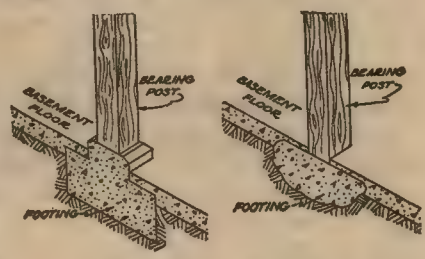
* If any of these three materials are not obtainable, they may be omitted and casein glue may be used at the rate of 1 pound to 9 pounds of lime.

Towel Rack for High Chair

A short towel rack fastened to the back of a baby's high chair as shown, provides a handy place to keep a wash cloth, towel and bib.

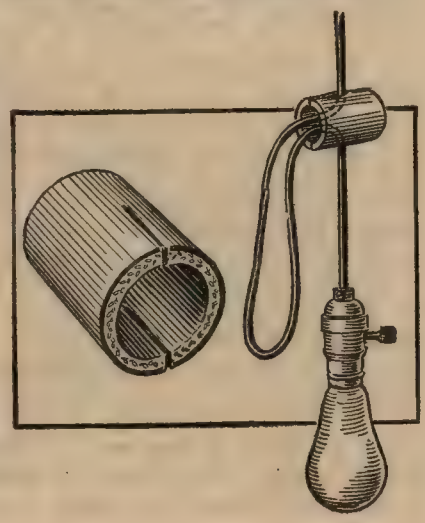
Footings for Basement Columns

Broad and flat footings for foundation walls and basement columns are much more effective in preventing settlement than are undersized footings with rounded or wedge-shaped surfaces. Column footing should extend above the floor level to protect the column from dampness.



DROP CORD SHORTENER

Take a small piece of radiator hose, cut a slit on each side as shown, and you have a simple shortener for an electric drop cord.

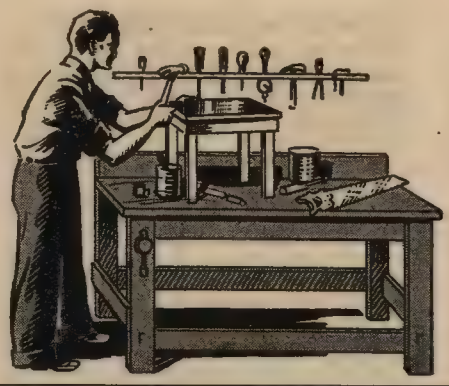


Efficient Use of Fireplace

To increase the efficiency of a fireplace and still practice economy, the following hints will be helpful: Before starting the fire place a log behind the andirons and against the back wall. This will prevent the fire being drawn directly into the masonry by the draft and wasting heat. The ashes should be left at a level with the andirons to provide a bed for glowing charcoal. The coals put out a steady heat and aid in igniting new logs when they are added. You'll find that split logs kindle easier than if left whole. Softwoods make a quicker and hotter fire than hardwoods. It is necessary to have a good fire, one that will consume around eight pounds of wood in an hour. Hickory, oak, hard maple, locust, rock elm and longleaf pine put out the most heat for their weight. A good fire is made by using both soft and hard woods like pine and oak. If a wood that throws off sparks is burned make sure that a screen is used. When the fireplace is not in use keep the damper closed or place a screen that fits closely into the opening to prevent furnace heat being drawn from the room and up the chimney.

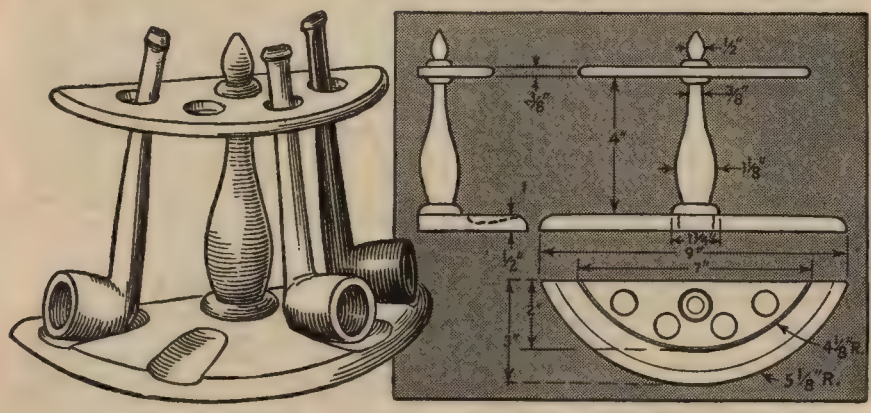
Safe Storage of Coal

When storing coal it should be kept away from all pipes such as steam, hot water, gas, water flues, etc. No rubbish should be allowed to accumulate around the coal and oily rags and paper should never be thrown on a coal pile.



Home Workshop • Hobbies •

How to Make a Pipe Rack



You'll enjoy working on this pipe rack and be proud of the finished article when it is done. One of the Western Pines—Idaho White Pine, Ponderosa Pine or Sugar Pine—will be ideal to use as they are easy to turn and cut to shape. Materials needed are: Pine lumber—1 piece ½ in. x 3 in. x 9 in. S4S, 1 piece ⅜ in. x 2 in. x 7 in. S4S, 1 piece 1⅜ in. x 1⅜ in. x 8 in. S4S, and 1 hardwood dowel ⅛ in. diameter, 1 in. long.

Turn the upright center post from the piece 1⅜ in. x 1⅜ in., 8 in. long. Working from a full scale pattern which should be made up before construction starts, rough out the stock and continue turning it until it is the shape of a cylinder 1¼ in. in diameter. Mark the proper dimensions on the cylinder for cutting and turning to shape. Complete the turning, but leave the turning of the "bottle neck" to its net dimensions until the last and use utmost care to prevent breaking the stock in two. Smooth the turning with sandpaper, grade ½, and finish off with grade 000. Drill holes for the dowel in the surplus ends. Cut off surplus ends and sand down for a smooth finish. Next, using radii given in the drawing, lay out the half-moon shaped edge on the top and bottom pieces with a pair of dividers. Mark the center line of the oblong holes in the top piece. Cut the pieces to shape with a jig saw or hand coping saw and with plane, rasp and sandpaper work the front edge of the top piece down to a half round, and the bottom piece to a quarter round edge. Locate and punch the centers of the holes for the center post in both pieces and lay out outlines of the indentures in the bottom piece. Bore ½ in. holes for the pipe stems and enlarge them to oblong shape, with a gouge. Use a gouge to hollow out the indentures on the bottom piece. Bore holes to receive the tenons of the center post for a tight fit. After rubbing smooth and cleaning with fine sandpaper, using ½ grade first and finishing with grade 000, insert the dowel and assemble the pieces with glue to form the pipe rack. When assembly is completed, tint all of the surfaces with wood oil stain. When dry, apply shellac; or if a high gloss is desired, finish with a coat of spar varnish.

CARE OF WOOD BITS

Holes bored in wood must be made clean and true otherwise good pieces of wood may be spoiled. Just as a well-balanced and well made saw or hammer does more and better work, so does a good wood bit. Don't buy bits just because they look good—try them out. In placing a bit in a brace be sure the shank rests snugly in the chuck or jaws of the brace.

A bit should carry itself into the wood without pressure on the brace. Watch the chips. If they are uniform in thickness it shows that the cutting lips are correctly located on the same level. If both thick and thin chips come from the hole, the cutters are not sharing the work equally. If the edges of the chips are rough, you know that the spurs are not doing their part. If the screw fills with wood fibre and releases its hold, the screw threads are not smooth and are not properly joined with the cutting lips.

Next to purchasing good bits is the importance of keeping them in good shape. Have a place to keep your bits so they won't be damaged by other tools. Never file a bit unless you are sure it needs it; then proceed with care. To re-sharpen the spurs rest the bit on a board with the screw pointing up. Draw a small file lightly on the inside of the spur. Never file a spur on the outside because that will destroy some of the clearance of the bit. To re-sharpen the cutters, rest the bit on a board with the screw down. File the cutters on the upper edge only. File both cutters equally.

If through accident a bit gets sprung, roll it on a level wood surface until the bend is located, then tap it on the high side with light blows of a hammer. When a boring job is finished, wipe off the bit with an oily rag, to prevent rust.

Tamper-proof Screws

When more than ordinary protection is desired, screws holding doors, hinges, locks, etc., can be fastened securely by drilling small holes through the shoulders at an angle of approximately 30 degrees and driving in finishing nails. It is almost impossible for trespassers to remove screws that have been treated in this manner.

Hinge From Chain

A piece of scrap chain may be used to replace a broken hinge on a garden or other light gate. Only three links of chain are needed. Nail one link to the gate post, leave one to act as the hinge, and nail the other to the gate.

Starting Wood Screws

Fitting a piece of chisel-shaped hardwood into the slot of a woodscrew will generally enable you to start it in a place that is not readily accessible.

Sure Grip for Pliers

A sure-grip for a pair of pliers can be made by fitting pieces of rubber tubing over the handles. The tubing also provides insulation while working around electricity.

Gloves Cleaned with Rubber Cement

One of the easiest ways to remove dirt from leather gloves, after changing a tire, is to use rubber tire-patching cement. Spread a thin coat of cement on the surface of the leather, let it dry, then rub your hands together. The dry rubber will roll off in small pieces and bring the dirt with it.

TOOL IDENTIFICATION

Initials or numbers can be placed on your wrenches, saws, etc., permanently by following this procedure. Clean tools to be marked with gasoline and fine emery cloth, being sure that all rust is removed. Have someone with a typewriter cut the desired name or initials into a dry mimeograph stencil. Trim out the portion with the initials leaving about three-fourths of an inch of the wax sheet on all sides. Make as many of these stencils as you have tools to be marked. Use library paste or rubber cement to fasten the stencil to the tool. An etching solution is made by mixing an ounce of copper sulphate solution and an ounce of potassium bromide solution. When ready to apply the etching solution moisten the stencil around the edges. Use an eye dropper to put on a little of the etching solution. Leave this on the tool for one-half to three-fourths of an hour, then wash off and dry. Bright colored paint rubbed into the etched letters will make them easy to see.

Improvised Leather Punch

You can make a useful punch for leather, cardboard, etc., by grinding a roller bearing to a point.

Getting the Most Out of Your Saws

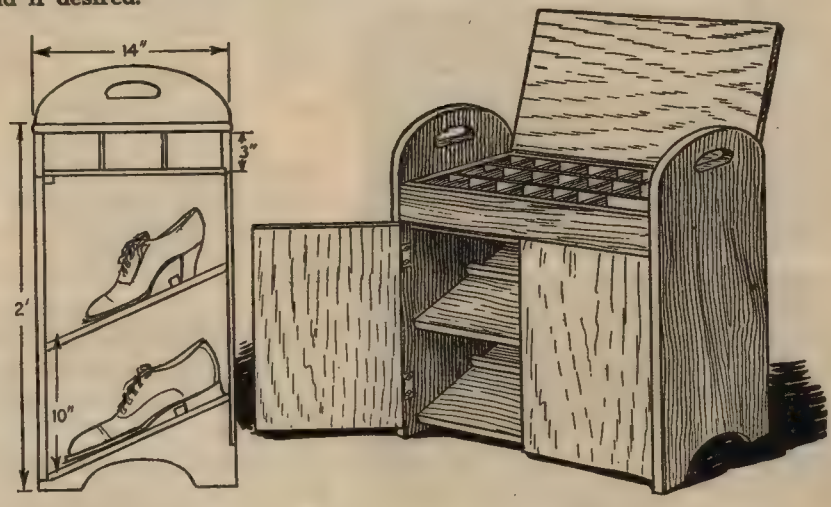
A rip saw is made for cutting with the grain of wood. The teeth have an angle of about 8 degrees on the front and 52 degrees on the back. The upper half of each tooth is set, alternately, one to the right, one to the left, to give clearance. In ripping, the cut should be started with the finer teeth at the point of the blade. An angle of 60 degrees between the edge of the saw and face of the work usually gives best results.

In using a cross-cut saw it is advisable to maintain an angle of 45 degrees between the saw and the face of the work. Extending a forefinger along the side of the handle aids in guiding the blade. Supporting the waste side of the stock will prevent it from splintering on the underside when the cut is finished. Do not twist off the waste stock with the saw blade. Examine the stock carefully to make sure there are no nails in the path of the saw.

When sawing with both rip and crosscut saws, full strokes are desirable as the user who does most of the cutting with a few inches of the saw has difficulty in keeping the line of the cut straight. The saw is also dulled more rapidly, because a few teeth must do all the cutting.

Combination Shoe Rack and Seat

Assembled from pieces of ½ or ¾ in. plywood, the shoe rack shown here also serves as a handy bath or bedroom seat. Cut pieces to dimensions given, assemble with screws, sand smooth, and paint or stain to match woodwork or furniture. A seat pad may be placed on top of the hinged lid if desired.



Teeter-Totter for Little Tots

Remove the back and arms from an old rocking chair and bolt a length of 2x8-inch lumber to the seat. You'll have a teeter-totter that will be appreciated by the youngsters.

To Remove Stubborn Screws

A tool you will find handy around the home workshop is a screw driver with a nut welded to the shank in such a way that a wrench can be used to turn it on jobs of removing large, stubborn screws or stove bolts. Any welding shop will be glad to fix up such a screw driver for a small amount.

Cement Repairs Valve

If an auto tire goes down because of a defective valve and you're unable to get a new one immediately, a temporary repair can be made by coating the threads of the valve stem with rubber cement and screwing the cap on tight.

FLOWER POT HOLDER

All you need to make this attractive flower pot holder is a piece of scrap board and a couple lengths of dowel rod. Construction of the holder is obvious from the sketch.

Getting the MOST Out of Your Hacksaw

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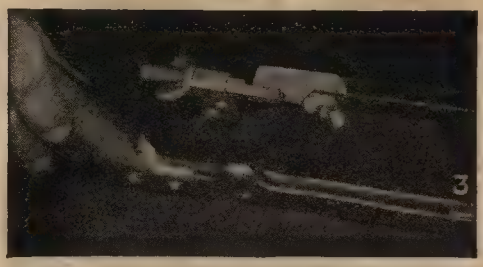
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If you're interested in getting the most out of your hacksaw, study this article and the accompanying illustrations carefully.

Assuming that you already have a good sturdy hacksaw frame, the next consideration is to obtain a blade suitable for the job at hand. Blades are available with varying numbers of teeth per inch ranging from 14 to 32. Blades with 14 teeth per inch are recommended for aluminum, copper, brass and soft steel. For use on ordinary solid stock and structural shapes 18-tooth blades are generally used. Blades with 32 teeth per inch are best for light tubing and sheet metal.

Select a blade according to the job to be done, insert the blade in the frame with the teeth pointing away from the handle. Tighten the thumbscrew until the blade is under strong tension. In starting a cut, grip the saw firmly as in Fig. 1. Keep off the sharp angles. Try to keep at least three saw teeth in contact with the metal at all times, Fig. 2. Cutting strokes should be long and steady. Use all the teeth in the blade. Apply pressure only on the forward or cutting stroke and lift the blade slightly on the return stroke. When using a new blade it's a good idea to retighten the thumbscrew after making a dozen or so strokes.

In cutting a wide piece of metal try using two blades in the frame with a separating strip as in Fig. 3. The strip of metal being cut out by the two blades should be bent down as cutting progresses, making room for the saw blade. A simple way to cut small pieces of thin sheet metal is to clamp it between a couple of wood blocks, as in Fig. 4, and to saw through the entire assembly. In sawing thin stock without blocks, be careful not to permit a condition where the teeth straddle the work as the teeth are almost sure to be stripped.

In cutting metal tubing, Fig. 5, it's a good idea to score a guide line around the tubing and then revolve it in the vise so cutting is done only on one wall at a time.

Trouble sometimes experienced in getting a nut started on a bolt shortened by sawing off the end, can be prevented by putting the nut on the bolt before sawing starts, as in Fig. 6. Removing the nut after sawing will straighten the part of the thread bent out of shape by the saw, making it easy to replace the nut.

A closed slit may easily be cut in a piece of sheet metal if the metal is first bent over a round object as in Fig. 7.

If you happen to break a blade, turn the work over and start a new cut that will meet the old one rather than try to finish the cut started with the old blade. A new blade usually has more set than a used blade and will jam in an old cut.

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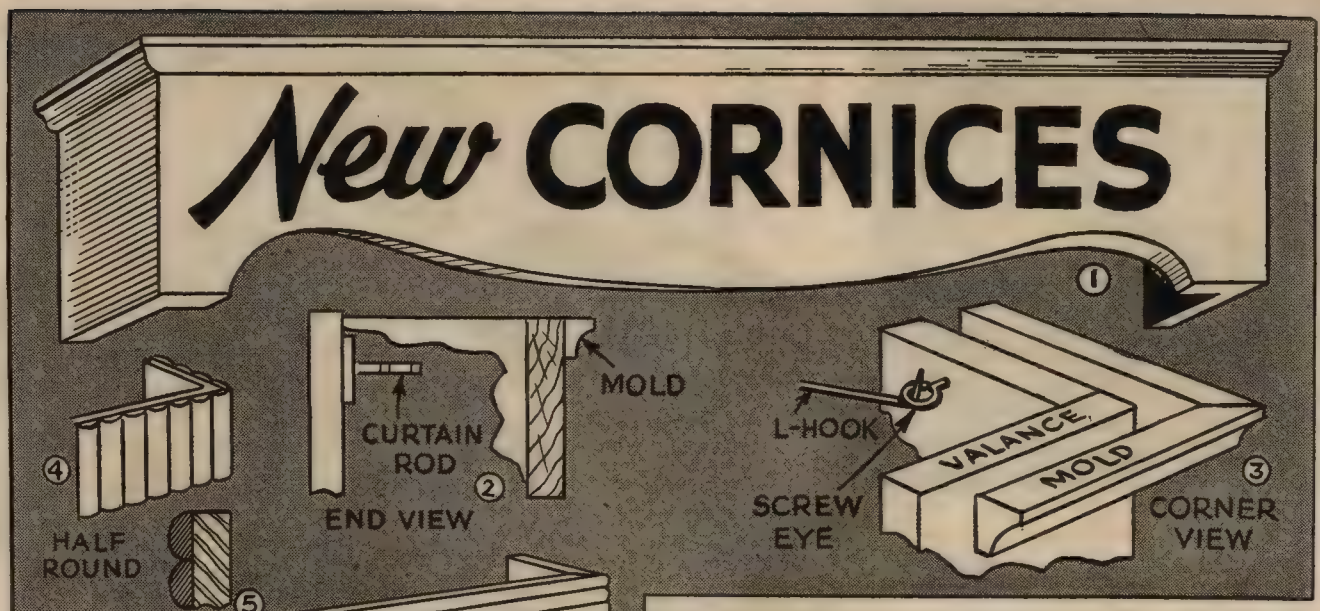
"TOUGH" COP

PROTECTS YOUR LAWN

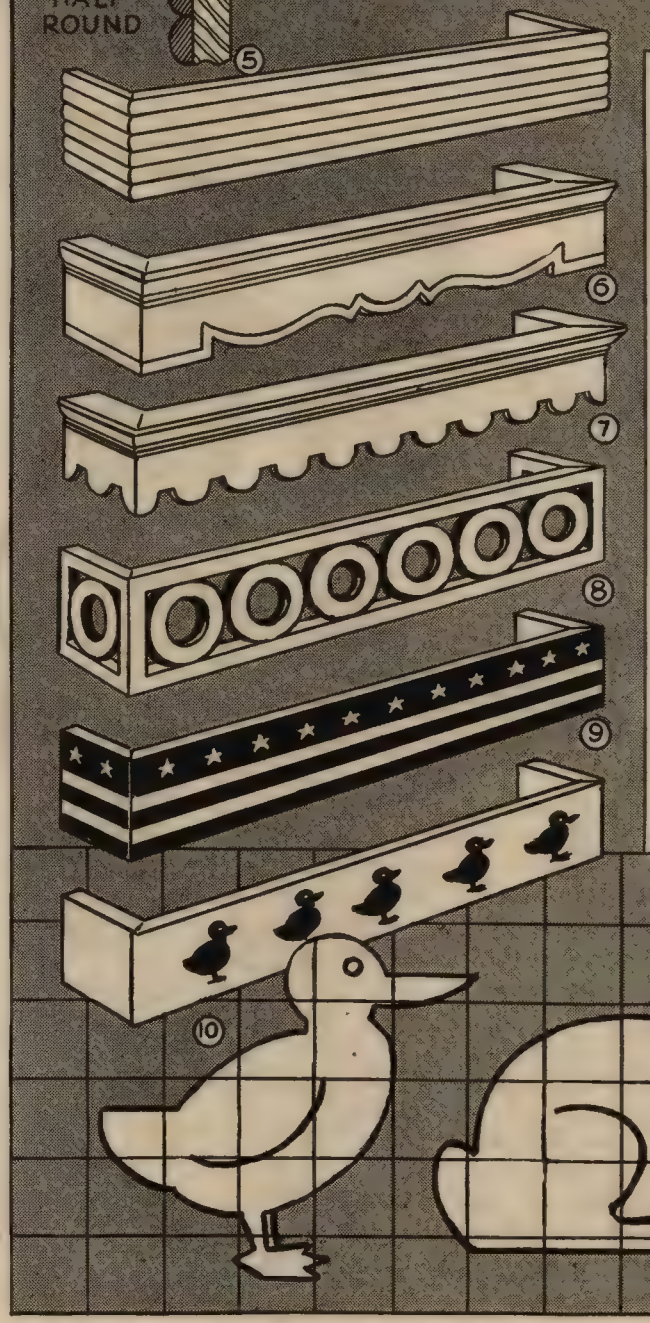
Here's an attractive "keep-off-the-grass" sign you can make in a short time. Material required consists of some scraps of pressed wood or waterproof plywood and small quantities of paint of the colors indicated. Use carbon paper to trace the full-size pattern, including the belt, buttons, etc., onto the wood. Use a scroll saw to cut around the outside of the pattern. Sand the edges lightly and you're ready to start painting. Take particular care because most of the attractiveness of the sign depends on the quality of the paint job.

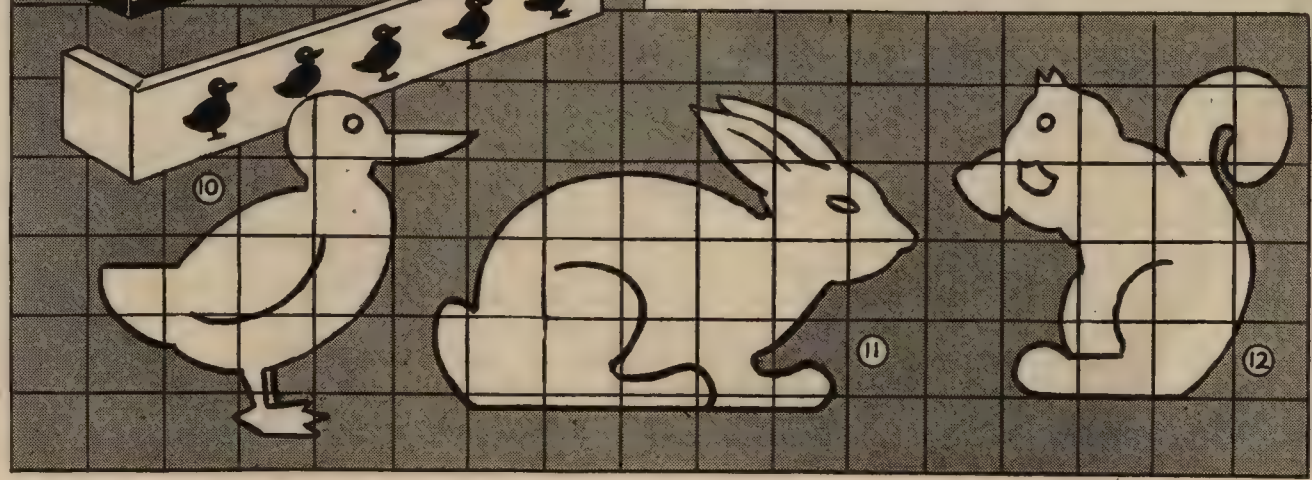
New CORNICES



You can give a smart appearance to windows in your home by covering unsightly curtain rods with these new cornices or valances as they are sometimes called. Figs. 1, 4 to 9 inclusive, show a variety of designs. Alternate patterns for the juvenile design, Fig. 9, are given in Figs. 10 to 12 inclusive.

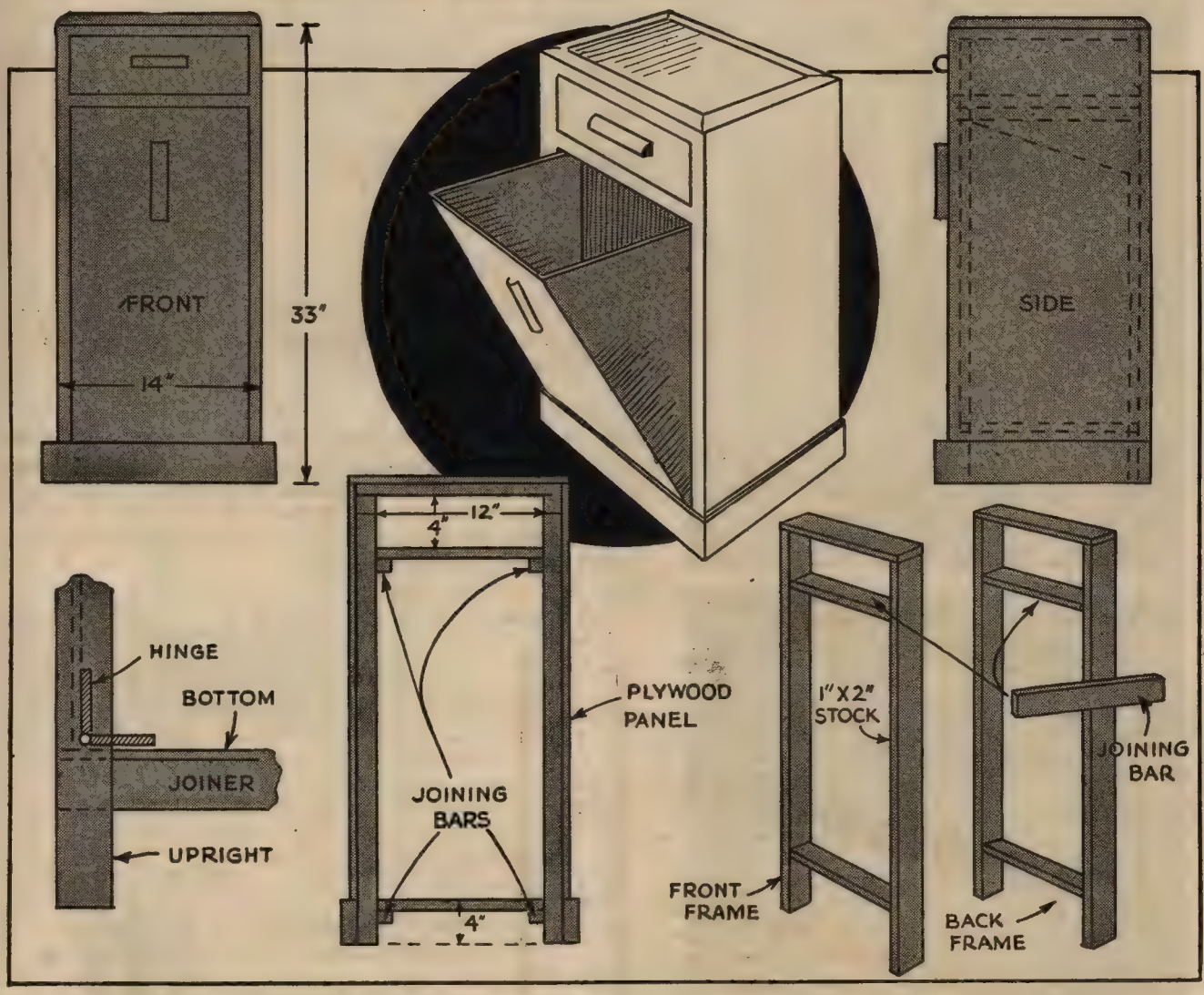
Clear white pine, ¾ in. in thickness, is ideal for cornice construction. The first step in fitting cornices, is to measure the windows to determine the proper length to cut the end pieces. The selected design is first worked out on paper, then traced onto the wood, using carbon paper, and sawed out. Cutting of curved portions may be done with a scroll saw or keyhole saw. Corners are preferably mitered, but the pieces may be butted together, as in Fig. 3, if you do not have a miter box or power circular saw. Corner joints are securely glued and nailed together. When dry, all the wood is sanded lightly and a finish of stain or paint applied. L-hooks can be used for cornice supports, as shown in Figure 3.



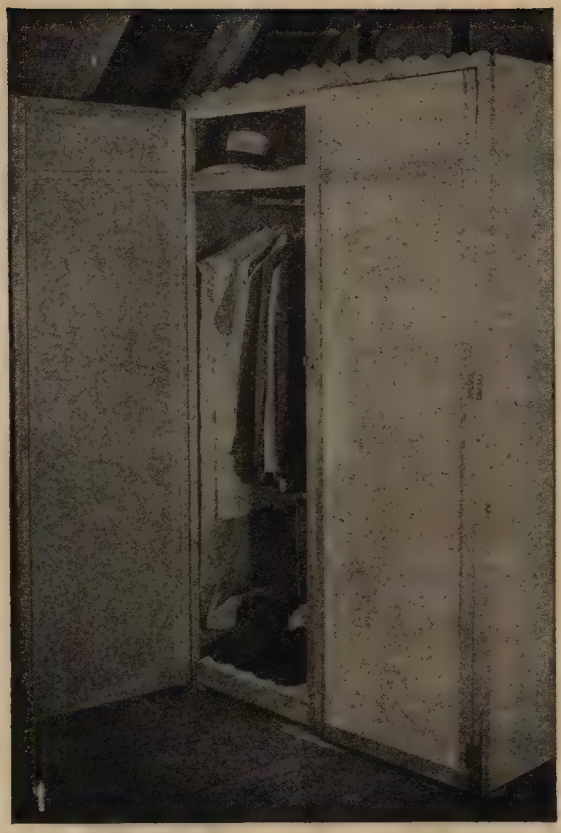


Bathroom Cabinet and Hamper

A USEFUL WORKSHOP PROJECT



The cabinet shown here is constructed from standard 1 in. x 2 in. and 1 in. x 3 in. lumber with panels of ¼ in. plywood or pressed wood. Construction starts with front and back frames that are made of 1 in. x 2 in. uprights 32 in. long. Join two stretchers 12 in. long for the hamper bottom frame and for the drawer framing, then fit top pieces nailed over the uprights. Make four joining bars 14 in. long and notch to fit under stretchers, thus joining frames. These act as drawer slides and as framing for the cabinet bottom. To form the top, square and cut a piece of plywood or pressed wood 14 in. x 14 in. Panel the sides and back. The sides stop 3 in. from the floor. Bring all the edges up to front so that a good finish will be made. Then take measurement for drawer. The frame is made out of 1 in. x 3 in. material and plywood is used for front and bottom. Drop-front hamper is made of plywood, all four sides and corner blocked at top and bottom with pieces 1 in. x 3 in, stock. A permanent bottom is nailed onto frame 4 in. from floor. Use flat hinges with one flange on cabinet bottom and other extending through hamper bottom and screwed on inside of front panel, to keep the hinges out of sight. The floor frame of the cabinet is finished with 1 in. x 3 in. material on front and sides. Drill ⅜ in. holes in front and side paneling for ventilation. For the top, get 5 ft. of picture moulding with rounded face and rabbeted under-side. Make a 14 in. x 14 in. frame with corners mitered. Fit a piece of double-thick glass on top and form in place with the frame using finishing nails set well into the wood. The front edges of the ply sides will require two coats of primer and putty to fill holes before they are ready for the finish coat of enamel.



Twin-Door Wardrobe

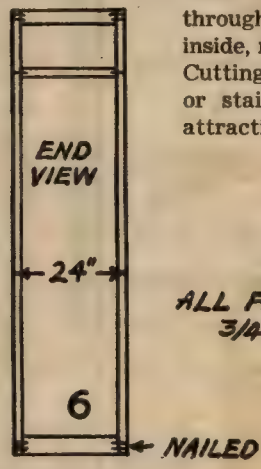
Stores Out-of-Season Garments

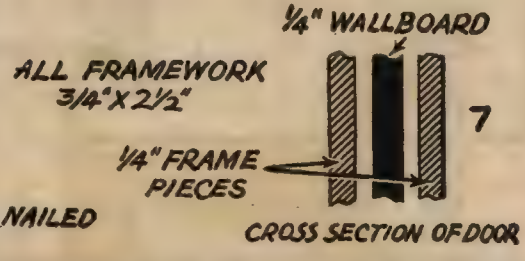
Short of closet space? If so, here's just what you need—a roomy wardrobe for storage of out-of-season garments in the attic. Such a wardrobe may be built in a couple of evenings by anyone with a slight knowledge of using a saw and a hammer. By making the wardrobe yourself you can get one about twice the size of those in the stores, at about half the cost.

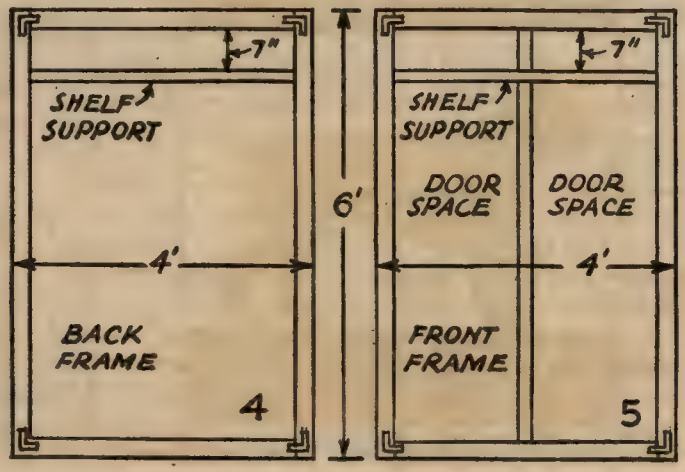
The wardrobe is made from ¼ in. wallboard—3 pcs. 4 ft. by 8 ft. are required, and ¾ by 2 or 2½ in. white pine frame pieces.

Construction begins with the two main frames, Figs. 4 and 5. Pieces are cut to the dimensions shown. Metal corner irons, available from ten-cent and hardware stores, screwed to the frame pieces, hold them together. The next step in assembly—the wardrobe should be assembled where it is to be used as it is too large to carry up most attic stairways, is to fit the two frame pieces together as shown in the end view, Fig. 6. One piece of 4 by 8 ft. wallboard makes the back and top, one the two front doors and bottom, and the third the two ends and covering for the hat shelf. Four-penny nails are used to fasten the wallboard to the frame pieces. Figs. 2 and 3, show framing details, under view of the hat shelf and the hanger bar for garments.

In making the doors, Fig. 1 and 7, ¼ in. frame pieces are fastened to both sides of the wallboard. Wire brads driven through from the outside are clinched on the inside, making doors that are good and sturdy. Cutting a top molding as shown and painting or staining the exposed wood increase the attractiveness of the wardrobe.







Attractive Foot Scrapers

CUT FROM SHEET METAL

Fitting your door steps with a foot scraper as shown here, will not only add to the attractiveness of the steps but will help encourage everyone entering your home to scrape snow and dirt off his shoes before stepping inside.

Making such a scraper is not difficult. Select the design you want, then enlarge the design. The enlarging job isn't bad once you get started on it. Rule a sheet of wrapping paper into 2 in. squares and draw the design given in the small squares into the 2 in. squares freehand. Be sure to include a strip at the bottom of the design as shown in Fig. 5, for fastening the scraper to the step. Using carbon paper, trace the full-size pattern onto sheet metal ⅛ in. in thickness. Sheet brass or aluminum is preferable but sheet iron may be used if either of the others is unavailable.

Cut around the outside edge of the design using either a hand or power-operated scroll saw with a metal-cutting blade. When finished with the sawing job, use a file to remove burrs and sharp edges. Sheet iron, if used, should be given a coat of red lead and then a coat of oil paint, preferably black. Clear lacquer or varnish should be used in cases where scrapers are cut from brass, to prevent tarnishing.

Gas Engine Fitted to Hand-Operated Mower

Are you tired of pushing a lawn mower? The accompanying photos show how "Dick" Thoureen, a resident of a Chicago suburb, solved the problem by fitting his mower with a small gas engine. With a little help from a local welding shop, you can do the same with your mower.

Dimensions of the parts required will vary according to the type of mower being motorized, but the general plan is applicable to almost any type of mower. A steel base plate, ¼ in. in thickness, which supports the motor and driving mechanism, is fastened to the framework of the mower with U-bolts and by brazing as shown in Figs. 3 and 4. The drive pulley on the engine is belted to a jack shaft which pivots at the base to tighten and loosen the belt providing the necessary clutch action. The clutch is operated by a ¼ in. steel rod which runs from the jack shaft to a lever mounted on the wood push bar near the handle, as shown in Fig. 1. Ends of the blades are cut off about 1 in. to provide space for mounting a chain drive wheel. Driving dogs in the wheels must be changed to opposite wheels. To make turning easy the roller should be cut into three sections and the sections separated by metal washers.

SUCCESSFUL GARDENING

Garden Duster Made from Tin Can

All you need to assemble the insecticide duster shown here is a tin can, a stick about four feet long, a small cloth sack and a couple of nuts and bolts. Remove ends of the can and bolt it to the stick at a height just above the tops of the plants to be dusted. Tie the sack containing the insecticide to the stick and let it hang in the position shown. To use the duster just strike on the ground near the plant.

Destroying Corn Ear Worms

Mineral oil of the medicinal type is effective in destroying ear worms in sweet corn. The corn ear worm is usually 1½ in. to 1¾ in. long and brown or light green in color. Do not confuse the ear worm with the corn borer. The ear worm enters through the silk while the borer drills through the husks and stalks.

An ordinary oil can makes a good dispenser for the oil. Put about four or five drops of the mineral oil at the base of the silks. If an insecticide containing pyrethrum is available, add a teaspoon of the liquid to about a pint of the mineral oil before applying. The best time for applying the mineral oil mixture is when the silks begin to turn brown.

SOLUTION FOR DESTROYING LEAF HOPPERS

A solution that usually destroys leaf hoppers that damage bean and potato plantings, can be made by dissolving three tablespoonfuls of regular soap flakes in about half a gallon of water. The mixture should be applied with a regular garden sprayer.

Simple Way to Water Cucumbers

Sinking a large flower pot into a cucumber hill, as shown, provides a simple method of watering. The water, seeping through the hole in the bottom of the pot, keeps the plants supplied with sufficient moisture.

Plant Marker

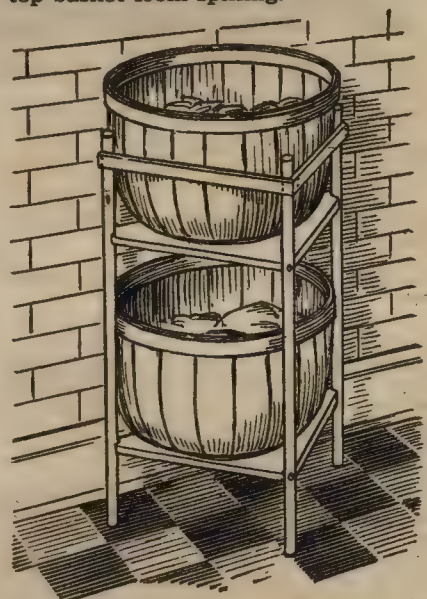
A plant marker that will last a long time regardless of how much it is exposed to the rain is easily made by printing the name of the plant on a slip of coardboard and dipping it in paraffin.

Keeping Poinsettias from Year to Year

Poinsettia plants will last and bloom for several holiday seasons if given proper care. Place the plant in a spot that is sunny, out of draughts, and where the temperature will remain around 65 deg. Do not keep the soil too damp but see that it does not dry out. Water every day. The plant will do best in a room where the humidity is high. Gradually cut down the watering in the early part of March when the leaves begin to drop. When the plant is dry place on its side in a cool cellar. In May cut back the stalks about three inches and place in a larger pot filled with fresh soil. Set outside in June in a fairly sunny place and water occasionally. Pruning delays flowering so do this during August. Bring the plant in again in September, and at intervals of every two or three weeks give a feeding of plant food.

Basket Stand Is Easy to Make

Here's a practical three-legged stand for your bushel fruit baskets. Attach the shelves to the legs with screws, putting the lower shelf about six inches above the floor. A railing near the top will prevent the top basket from spilling.



Killing Caterpillars in Trees

An easy way to kill caterpillars in trees is to take a piece of screen wire, form it into the shape of a cone and fasten to the end of a pole. Put a kerosene soaked cloth in the cone, ignite it and place under the caterpillars.

USING

Violet King, Rose King and Invincible Crimson asters

MOST annuals thrive in an open, sunny situation. There are a few, however, which can be used with gratifying results in a partially shaded location.

Annuals may be put to a great many uses. The most practical and successful way of using them for a landscape effect is in the form of a flower border. This area may be as large or as small as the home owner wishes, may be regularly or irregularly shaped, and usually can be located on the property in such a way that it presents an interesting and orderly picture in the development of the home grounds. It should never be an out-of-place, large flower bed which merely spoils an otherwise useful lawn area. The advantage of starting with a flower border is that over a period of time additions may be made so that what originated as a simple little border eventually be!comes a complete garden or "outdoor living room" in the development of the home and its surroundings.

When a permanent garden is established, annuals are of great value in filling in the vacant spots between the clumps of perennials. Also, they help greatly in prolonging the blooming season in any garden and in furnishing color in the late summer when few perennials are in bloom.

Another practical method of using annuals is to grow them in a cut flower garden. This is done by planting the annuals exactly as vegetables are planted; that is, a row of zinnias, a row of marigolds, a row of godetia, and a row of scabiosa. Flowers in rows present a good effect and are easily cared for. Plantings can be made in the vegetable garden or in a separate area set aside for the purpose.

Annuals are unsurpassed for specialized uses in the development of landscape effects. For example, they may be used in window boxes in connection with foundation plantings, edgings, and borders of walks. For window boxes select types which will thrive with some neglect and are fairly tolerant of a lack of water. It is also desirable to choose those which have a tendency to hang over rather than stand erect. Ageratum, if watered well, is an especially good annual in a window box. Petunias are unquestionably the best for this purpose. In dry locations portulaca will give an interesting effect although it is not very showy to the passers by.

Annuals may be worked into foundation plantings. Types which bloom during August and lend variety and color to plantings around the house are especially desirable. On the shady side of the house, tuberous-rooted begonias (which may be listed as annuals although they are actually tuberous plants), will give very satisfactory results. As edgings to give a dignified effect to formal gardens, ageratum, sweet alyssum, and mignonette are all satisfactory.

Gardens of Annuals

For summer homes annuals are satisfactory for use in a garden without any perennials or bulbs. If this is desired, the planting should be made relatively late in the spring when all danger of severe frost is past. Some attention should be paid to the arrangment of color combinations as well as to the height of the plants in such a garden. This should offer quite a display of color when it is in bloom.

Annuals with Perennials

Annuals may be used with good effect in the perennial garden or border to fill in the open spaces which appear after the perennials have finished blooming. The more vigorous annuals, such as marigolds, zinnias, snapdragons, petunias, and bachelor's buttons, are unsurpassed in locations of this type. Very interesting effects may be achieved by working the white varieties of annuals into flower borders. Blooming as they do during the hot and sultry days of August, they have a very cooling effect upon the garden. When annuals are used in perennial borders, they should be given ample space to develop to the best of their ability. One or two plants will be more satisfactory than many plants crowded into a small area.

Outstanding Annuals

Ageratum—A tender annual, easily raised from seed. A better system is to propagate by cuttings from plants kept over in the greenhouse or in the house. Useful for edgings and flower beds for their blue flowers which are continuous.

Bachelor's Buttons—Will stand some crowding in the garden. Masses of blue, white, and pink flowers. Blue varieties are best. Require a sunny location and are tolerant of poor soil.

Calendula—An annual which will stand partial shade and quite cold

ANNUALS *in Your* GARDEN

weather. Bright yellow flowers. Many improved varieties are available.

California Poppy—An annual plant for sunny, poor soils. Free blooming and inclined to spread.

Candytuft—This plant will bloom in about six weeks from the time the seed is sown and will continue until frost. The plants should be set six inches apart. Particularly useful for edgings, flower beds, and borders. It should have moist soil for best results.

Cleome—Plant the seeds where the plants are desired. Spiderflower will spread profusely and bloom during August. Large, pink flowers.

Cosmos—Is tolerant of poor soil, preferably of a sandy nature. It will bloom profusely from July to frost. Easily raised from seed. It is important to plant early flowering varieties.

Cynoglossum (Chinese Forget-me-nots)—A biennial plant that can be grown as an annual in garden soils. An attractive blue color. Good as a cut flower.

Garden Sweet Pea—It requires a cool temperature for best results. The seed should be sown two inches deep in rows in early April, or may be started in small pots indoors around the middle of February and allowed to develop in a cool temperature. Around the middle of May, in most locations, the plants can be set out of doors. To grow sweet peas well the soil should be thoroughly worked up and a liberal application of well rotted manure applied in the fall. During the growing season the plants should have a readily available source of fertilizer. For best results they should be set several inches apart and supported with brush as soon as they begin to develop. Grey birch is unsurpassed for this. Any good catalog will give a complete list of the newer varieties of sweet peas.

Gypsophili—Commonly called Baby Breath. This plant does very well in ordinary garden soil in the early spring in the location where it is intended to bloom. It should, if possible, have a partially shaded location for best results, particularly under apple trees.

Larkspur—Dependable annual for moist soils. Excellent color range. Good cut flower. Will self sow.

Marigold—A large group of successful annuals. No garden is complete without them. They grow under almost any conditions and flower profusely from seed sown in the location where they are desired. Too much plant food will tend to throw the plants into vegetative growth, curbing their flowering qualities.

Mignonette—Plant in location desired. Old fashioned fragrant annual. Not showy.

Morning Glory—A climbing vine. Best variety is Heavenly Blue. They prefer a sunny location and are tolerant of poor soil.

Nasturtium—A popular group of climbing plants. Should be planted in such a position that they have a support to climb on. For early effects the seeds can be started in pots indoors as with sweet peas. They make attractive house plants during the winter season.

Nicotiana (Flowering Tobacco)—Successful in any location where petunias do well. The white flowered form is much more attractive than some of the colored forms.

Petunia—One of the largest groups of annuals. Any number of forms, varieties, and colors can be obtained. These seeds can be sown out of doors in the location where they are intended to bloom, or can be planted indoors in the spring and set out later. It is also possible to grow them as house plants during the winter.

Phlox Drummondi—An annual which likes a moist rich soil for best results. It should be in full sunlight.

Scabiosa—Sometimes called Pincushion Flower. A successful garden annual in pastel shades of pink, lavender, and rose. It will grow under any condition if there is moisture in the soil.

Snapdragons—For best results the seeds should be sown indoors early in the spring. As soon as the plants are large enough they should be transplanted to about three inches apart and if possible raised in a cold frame. They are very sensitive to a hard frost and to drying out. Care should be used in sowing the tiny seeds not to cover them too deeply. Sowing the seeds on the surface of the soil and watering from the bottom is a good safe bet. The plants can be set out of doors as

(Continued on Page 34)

First Lady Petunias

soon as all danger of frost is past. If set 12 or 14 inches apart they will soon develop into attractive flowering plants. Pinching will help the plants to spread out.

Sunflowers—Many of the new dwarf varieties of sunflowers are very attractive in their color effects, and are easily grown. These are particularly successful for flower arrangement or decorative purposes. Large flowered sunflowers are chiefly of value as a source of seeds for birds during the winter.

Sweet Alyssum—An excellent annual for edging flower beds and borders. Seeds can be planted ⅛ of an inch deep in ordinary garden soil and transplanted into the garden as the season warms up. They also may be sown in the location where they are to bloom.

Verbena—One of the most showy of the low growing garden plants. The seeds should be sown indoors early in the spring in a light, sandy soil and transplanted into pots as soon as they are large enough to handle. Plants can be set out of doors in a permanent position as soon as danger of frost is over. In this way early blooming is assured and the plants will continue to bloom throughout the garden season. Colors are available in almost any shade.

Zinnia—One of the showiest of all annuals. Many types are being produced now. The plants will grow in any sunny location and are very tolerant of relatively poor soil. The seeds may be sown in the location where the plants are to be grown or can be planted early in the spring and transplanted.

TIP ON PLANTING EXPENSIVE TREES

It is a good practice to coat the trunk and branches of expensive trees with paraffin prior to setting them out. The paraffin, which should be of the type having a low melting point, may be applied by brushing. The paraffin helps to keep the trees from drying out before they become established.

TREATING TREE WOUNDS

Adhesive tape is handy for treating wounds on small trees. When the bark has been scuffed or scarred just wrap adhesive tape, 2 in. size is best, around the wound. This will keep out the air and helps stimulate healing. The tape need not be removed as it will eventually rot and the growing tree will cause it to burst.

KILLING MOLES IN LAWNS OR GARDENS

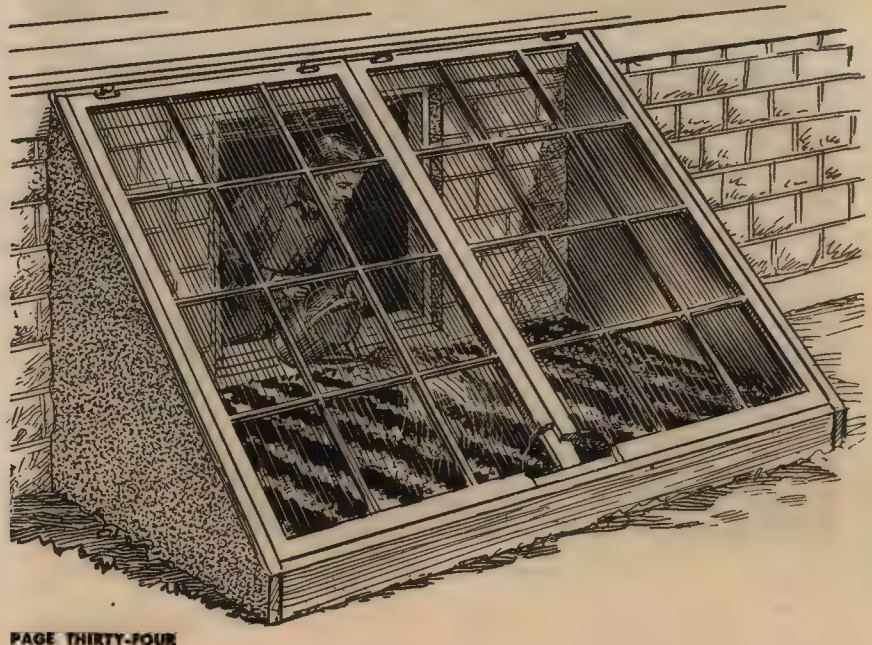
When moles undermine your lawn or garden, a method that usually gets rid of them is to dig a small hole in one of the runways. In this hole pour some concentrated lye and cover the hole. When the mole returns, he will get lye on his feet, causing him to leave in a hurry.

EVEN DISTRIBUTION WHEN PLANTING GRASS SEED

To help get an even distribution of grass seed when reseeding a lawn, try placing the seed in a coffee can having numerous holes punched in the lid. A little flour is mixed with the seed, which will enable you to see just where seed has been sowed and help you get better distribution.

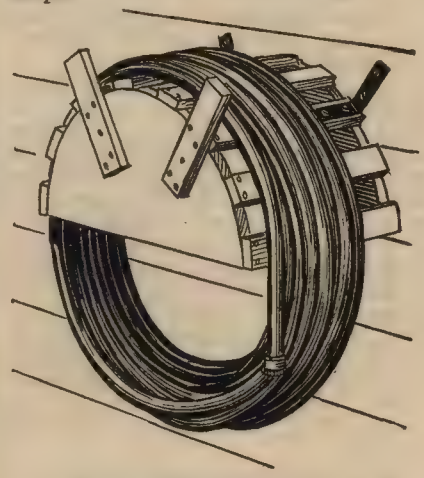
HEAT FROM BASEMENT PREVENTS FREEZING OF HOTBED PLANTS

It's easy to water and care for this hotbed which is attached to the outside of a basement window. The hotbed is constructed from old window sash and boards as shown in the sketch. Plants are kept from freezing during cold weather by opening the basement window. Outside ventilation is provided by raising the sash.



Rack Protects Garden Hose

Here's a simple rack for garden hose that may be assembled in a short time by the home handyman from scraps of lumber picked up around the garage or basement workshop.



DESTROYING EARTHWORMS IN LAWN

Try sprinkling a solution of bichloride of mercury and water on your lawn to destroy the earthworms. A half ounce of bichloride of mercury to 15 gallons of water is usually sufficient. This amount of solution is sufficient to cover an area of about 100 sq. feet.

GROWING BETTER TOMATOES

If the tops of tomato plants are pinched out it will make the plants bushier and help hold them closer to the ground. Care must be taken to prevent tearing the stalk when pinching out the tops. Mulching staked tomato plants helps to keep the soil damp much longer and keeps soil from packing so easily.

WATERING EVERGREENS HELPS GROWTH

When evergreens are around four feet in height, they require about five gallons of water every ten to twelve days during the growing season. During the winter they should be watered three or four times, always when the temperature is above the freezing point.

Getting Rid of Insects on House Plants

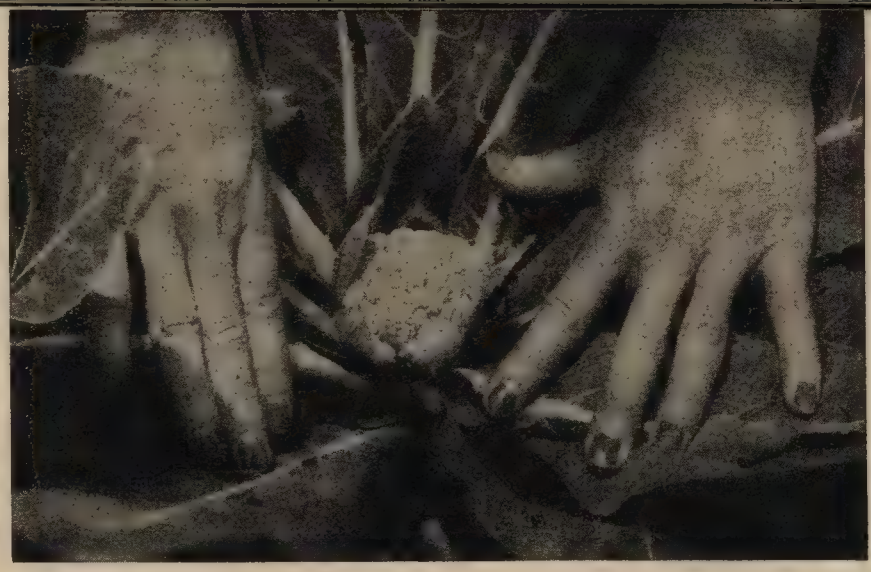
To control the insect pests that attack stems and leaves of house plants, try dipping the entire plant, except the pot, into a solution of soapy water. Cut a collar to fit over the top of the pot to hold the dirt. While the plant is immersed, rub the leaves and stems to get rid of insects. Remove the soap by rinsing in clear cool water. Repeat this treatment about once a week.

Beautifying Fences

If you have an unsightly fence that needs beautifying, let some dishrag gourd vines and hyacinth beans grow on it. The yellow and orchid blossoms will last till frost and the odd shaped gourds and purple bean pods are quite attractive.

BLANCHING CAULIFLOWER

The three photos at the right show how to blanch cauliflower. Soon after the head starts to form as shown in the top photo, the blanching process should start by gathering the outer leaves and tieing them together at the top of the plant with coarse twine or strip of cloth. The head should be cut and used before the "flower" begins to break up and become ricey.



Growing Rhubarb Successfully

Rhubarb takes comparatively small space and if given reasonable care it will continue to produce year after year. The plants are preferably set out in the spring. No stalks should be pulled the first summer, but any seed pods that develop should be removed. Manure should be heaped around the plants in the fall and spaded into the ground the following spring. Only a limited amount of rhubarb should be used the second year—none after July 1st. Beginning with the third year, if the plants thrive, stalks may be used as desired during the spring and early summer. Rhubarb stalks should be pulled, not cut.

Will Cucumbers and Cantaloupes Mix

No. Cucumbers and Cantaloupes will not mix, but in growing the plants close together there is danger of transmission of diseases and insects. Cantaloupes sometimes cross with pumpkins. The first year the fruit will not be affected but it's not advisable to save the seeds.

Using Wood Ashes

Wood ashes contain a considerable amount of potash which is one of the three important elements for plant growth. Potash in the soil helps build strong root systems.

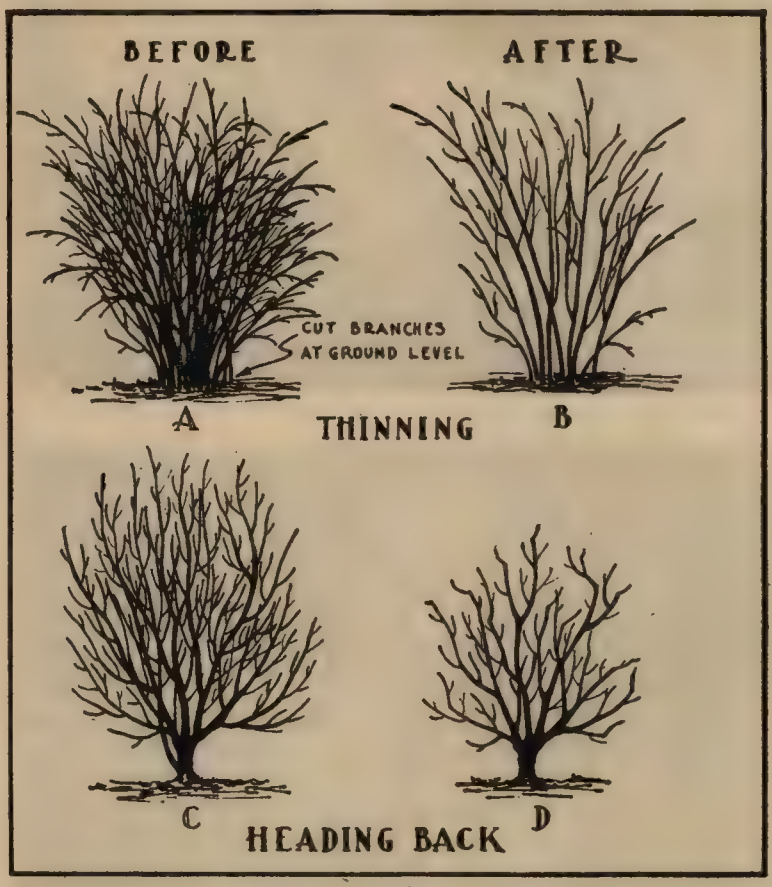
To get the most benefit from wood ashes, they must be stored in a dry place until used. Rain leaches potash away. If the quantity of ash available is small, it's usually best to place it near the individual plants—never closer than 3 inches, rather than broadcast it over the entire garden area.

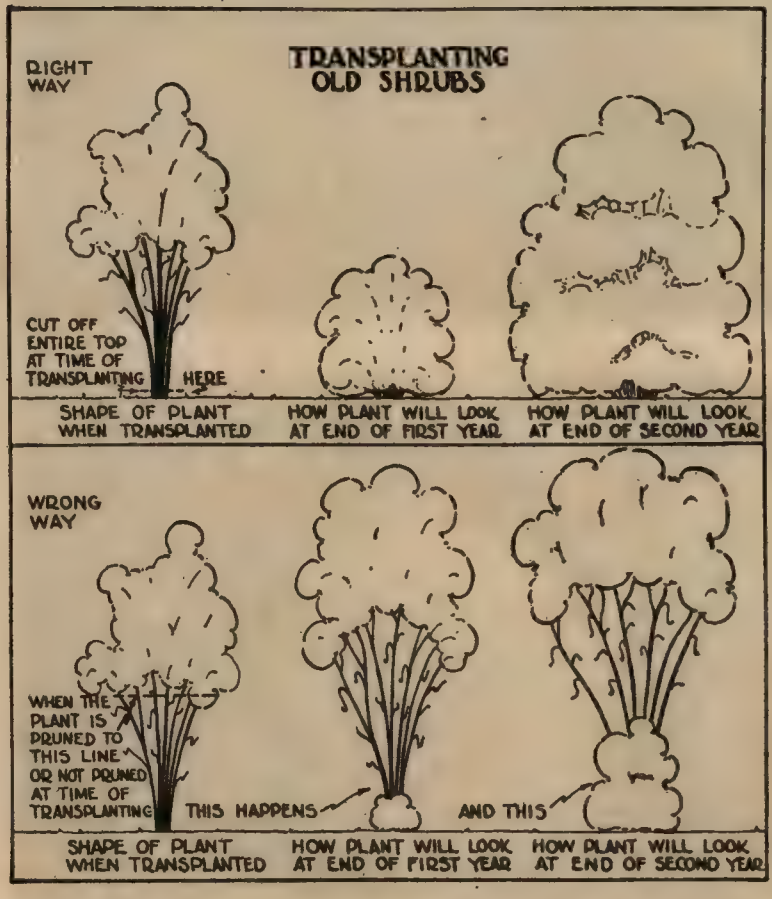
Ivy Poisoning

Poison ivy is a 3-leaf plant growing from a few inches to several feet in height. To prevent poisoning, learn to recognize the plant and stay away from it, and don't handle tools that have been used to cut it. An extra precaution is to wash your hands in a heavy lather of good strong laundry soap and let the lather dry on the skin before going near ivy. Don't rub your hands on your face and be sure to wash them with plenty of laundry soap and lather as soon as you return to the house.

Applying a styptic pencil to pimples caused by ivy poisoning will often cause them to dry up. The pencil is moistened, rubbed gently over the inflamed surface, and the deposit allowed to dry. Another treatment is to use an application of baking soda mixed with water to form a thin paste.

TIPS ON PRUNING SHRUBS




RIGHT WAY
TRANSPLANTING OLD SHRUBS
CUT OFF ENTIRE TOP AT TIME OF TRANSPLANTING
HERE
SHAPE OF PLANT WHEN TRANSPLANTED
HOW PLANT WILL LOOK AT END OF FIRST YEAR
HOW PLANT WILL LOOK AT END OF SECOND YEAR
WRONG WAY
WHEN THE PLANT IS PRUNED TO THIS LINE OR NOT PRUNED AT TIME OF TRANSPLANTING
THIS HAPPENS
AND THIS
SHAPE OF PLANT WHEN TRANSPLANTED
HOW PLANT WILL LOOK AT END OF FIRST YEAR
HOW PLANT WILL LOOK AT END OF SECOND YEAR

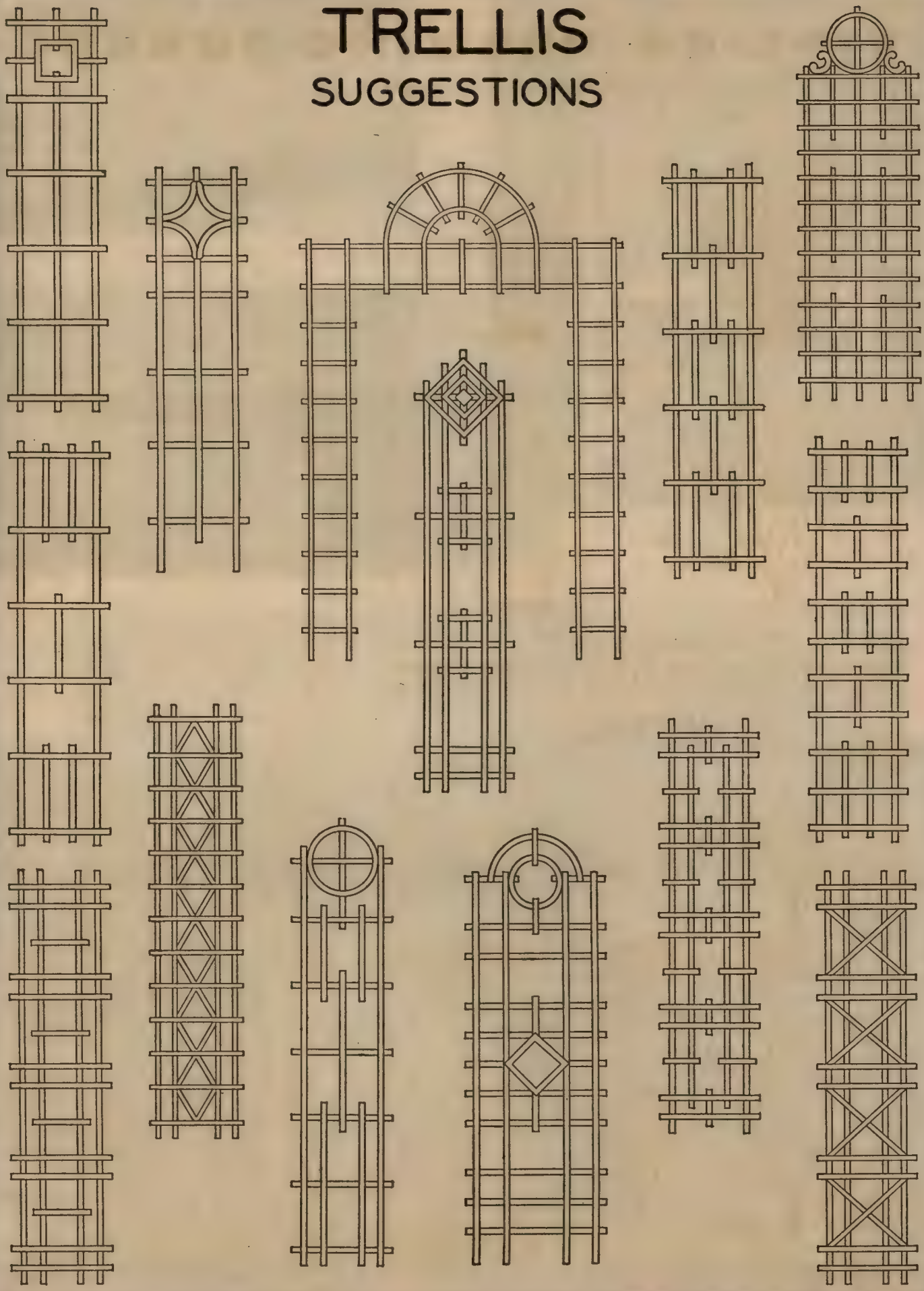
Proper pruning is necessary if the beauty of shrubbery is to be maintained. Here are some reasons why pruning, which is a dwarfing process, is done: To remove the dead, diseased or injured branches. To remove the old or surplus branches. Shrubs that have a vigorous growth should have the old and unsightly branches removed each year. To keep a definite size or form and to encourage flowering and fruiting. Pruning aids in transplanting by balancing the top with the roots.

Most shrubs should be pruned in the winter, but when heavy flowering and fruiting is expected each year, the age of the wood on which the flowers and fruit are produced determine the time of pruning. Shrubs generally are placed in four groups according to time and extent of pruning. The first group includes the shrubs which grow slowly and when pruning only the dead wood is removed. Examples are viburnums, flowering quince and most broadleaf evergreens. The second group includes plants that have a fairly rapid growth and produce blooms on the growth of the previous year. They should be pruned immediately after the blooming. Examples are dogwoods, barberry, spireas (early blooming) jasmines and winter honeysuckle. The third group has plants that grow fairly rapid and produce blooms on the current season's growth. Prune these at any time during the dormant season. This group includes honeysuckle (except winter honeysuckle) althea, crepe myrtle and privets. The fourth group includes plants that grow very rapidly and produce blooms on the current season's growth. These may be pruned during the dormant season removing all two-year and older wood as this is necessary due to the fast growth of these plants. Examples of this group are hydrangea, spirea (late blooming) and sumac.

Many shrubs have a growth of shoots each year at the base of the plant. As these shoots branch they give rise to numerous smaller branches. Each year the growth of new shoots becomes less vigorous resulting in a loss in the production of blooms. The dead, diseased and older branches should be removed each year so that the plant will be renewed. When the growth of branches becomes so small that the flowering is no longer satisfactory or if branches become crowded, the older branches should be removed at the base as shown in Figs. A and B in the sketch. After pruning the shrubs the first year it is advisable to prune them each year making it unnecessary for severe pruning which usually leaves the plant looking rather unsightly until it regains its normal appearance.

When plants have grown too tall for a particular purpose it is usually advisable to prune them as shown in Figs. C and D. Try to keep the natural shape of the plant. Some of the older branches should be thinned and others cut back where the small shoots arise. If the pruning is done throughout the plant new shoots will arise at all parts which in turn gives the plant a more satisfactory shape. When old shrubs are transplanted the entire top should usually be cut off as shown in the upper sketch. Results of improper pruning are shown in the lower sketch.

TRELLIS
SUGGESTIONS



Courtesy of SOUTHERN PINE ASSOCIATION

A garden is a very important background for a home. A successful garden must be deliberately, carefully and sensibly planned. Consider the location for the pergola, the rose trellis, fence, rock garden, pool and other decorations. Be sure they are placed in locations best suited to them and the house. Any mill man or carpenter can easily build the trellises, fences, and other garden decorations that we show in this book.

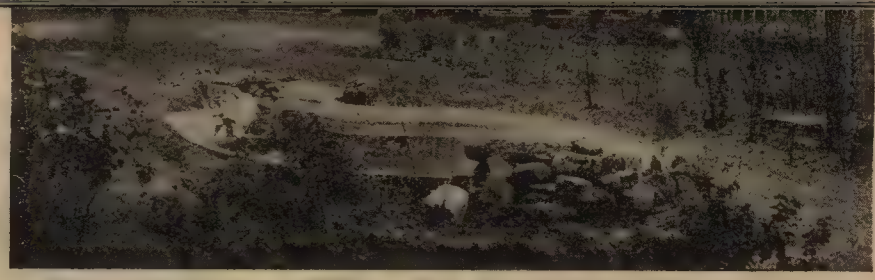
This large trellised pergola with a seat at each end, when covered with vines, makes an ideal out-door living room.

An adorable little play house in an ideal play yard with a slippery slide and everything.

A trellis fence screens the garden and also serves as a support for climbing roses and other vines.

The lovely fountain, set in a small pool and circled with stepping stones, beautifies this garden. The pergola with seats, the low wall and the bird house complete the garden picture.

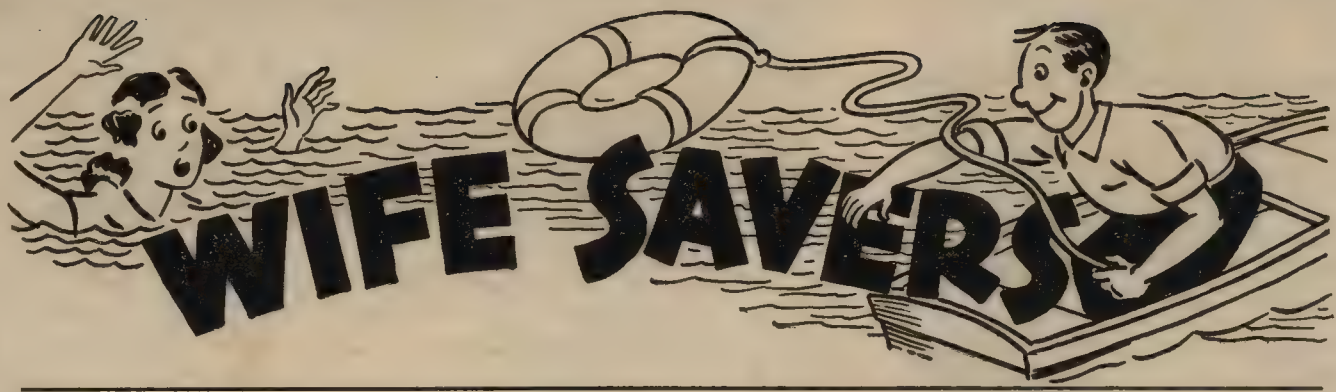
"Daddy, please fix my swing."



An attractive pool is always an asset to a garden.

Your dog deserves a comfortable home.

A guest house, play house or studio will add to your garden.

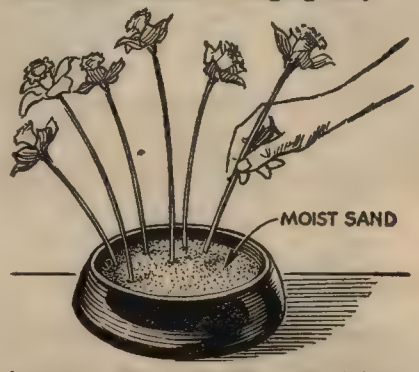


Blotters Absorb Spilled Liquids

Keeping a couple of white blotters handy often prevents a bad stain in table linens on which a liquid has been spilled. Use the blotters one on top and the other underneath the cloth to absorb the liquid.

Cut Flowers in Moist Sand Easily Arranged

Placing cut flowers in a bowl containing moist sand will keep them fresh and makes arranging easy.



REMOVING BURNED CRUST FROM CAKE

If the cake you have baked is burned slightly, try removing the burn with a grater. Use only a slight pressure on the grater.

CLEANING A MEAT GRINDER

When you have finished running meat through a grinder, run through a piece of hard bread, which will save the meat and clean the grinder.

KEEPS BREAD CRUMBS FROM SCATTERING

When grinding bread crumbs you can keep them from scattering by tieing a paper sack over the end of the grinder to catch the crumbs.

WHIPPING EGG WHITES RAPIDLY

Egg whites whip faster if the eggs are at room temperature. It's a good idea to take them from the refrigerator at least half an hour before using.

KEEPING LEMONS FROM GETTING DRY

A good way to keep lemons from getting dry in a refrigerator is to place them in a jar.

"Speed Up" Dish Washing

Here are a few hints to help you speed up dish washing.

Pans that have been used for dough mixtures, eggs, cereals, etc., should be rinsed or soaked in cold water to make cleaning easier. Hot water is best for dishes and pans that have been used for sugar, icing, syrup and other sweets. Try using hot soda water to remove the grease from pots and pans. Soaking them in the soda water will clean them in a hurry. To clean fruit squeezers, graters and strainers try using a small stiff brush. Clean the grater with the brush as well as you can and rinse in cold water then in hot water.

Marking a Hem on Dark Cloth

When marking a hem on a piece of dark cloth use a piece of hard white soap. The soap is easily removed by rubbing between the hands.

Preventing a Stained Hat Band

Place a folded strip of cellophane under the inside band of a hat to prevent oil and perspiration from soaking through and staining the outside band.

Sharpening Food Chopper

You can sharpen the cutters of an ordinary food chopper in a short time, by using auto valve-grinding compound. Just put a little compound between the cutting surface of the revolving knives and the steel plate, and turn the crank.

Easy Way to Clean Waffle Irons

It's easy to clean a waffle iron by using a stiff fiber or soft wire brush. To prevent sticking do not overheat the iron before the batter is placed in it. You should never let the iron heat longer than the time recommended by the manufacturer, which is usually around five minutes.

Mice Dislike Camphor Odor

To keep mice away, try scattering bits of camphor in cupboards, drawers and other likely places you might find them.

Kitchen Help

An old percolater placed on the back of the stove serves as an efficient container for conserving excess grease from bacon, sausage or other meats. The grease is strained when placing it in the percolator and when left on the stove it remains soft, ready for use.

Paint Brushes for Children

Brushes from old nail polish bottles make handy paint brushes for children. The polish may be removed from the bristles with nail polish remover.

Making Windows Shine

A piece of crumpled newspaper is useful in drying windows after washing. Rubbing the glass with the paper will make it shine.

PREVENTING BREAKAGE OF GLASSWARE

Delicate glassware is frequently broken when placed in a dishpan. This can often be prevented by placing a towel in the bottom of the pan.

Cooking Fudge

To prevent fudge from boiling over, try rubbing butter around the top edge of the pan.

Making Beets More Tasty

A little horseradish added to hot buttered beets gives them added flavor. Put a couple of tablespoons of melted brown sugar over the beets to sweeten.

Square Cookies Pack Better Than Round Ones

When making cookies to send by mail it's a good idea to cut them square instead of round as square cookies will pack better and take less room.

Broom Handle Has Hook in End

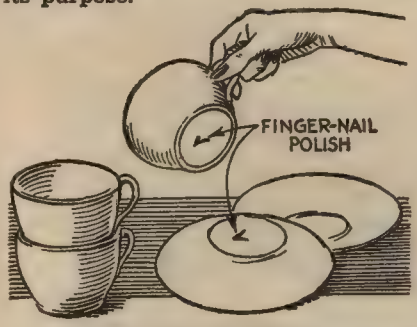
Fitting a hook into the end of a broom handle increases its usefulness. The hook may be used in "retrieving" window shades that have suddenly sprung to the top, pulling boxes from high shelves, a hanger for the broom, etc.

Marking Dishes with Nail Polish

You won't have any trouble identifying your dishes at a basket dinner or picnic if you mark them with finger nail polish.

When serving drinks, nail polish may also be used to put guests' initials on the glasses. Being able to identify the glasses promptly will save time and confusion when it's time for refills.

Nail polish may be washed off either dishes or glassware with polish remover, after it has served its purpose.



Old Sheet Makes Cleanup Easier

Spreading an old sheet on the floor around a sewing machine will catch ravelings, threads, etc. and make cleaning up easier.

Use Old Piano Stool When Ironing

An old piano stool refinished to match your kitchen furniture makes an excellent adjustable seat that is especially convenient to use while ironing.

Preventing Fatigue When Ironing

A large piece of corrugated paper or a heavy mat to stand on when ironing helps prevent fatigue.

Spice Balls for Making Pickles

A tea ball may be used as a spice ball when making pickles. It's much easier to use than trying to tie the spices in a piece of cheescloth.

GREENS FROM BEET TOPS

Greens from beet tops are tasty. To prepare them all you need to do is wash them and cook for about ten minutes in a small amount of water. They may be seasoned with melted butter and lemon juice.

Preparing Fudge for Mailing

When making fudge to be mailed, try pouring it into a tin that has been lined with several thicknesses of waxed paper. Cover it and it will stay fresh much longer than if cut in pieces.

Getting Rid of Ants

An effective way to get rid of ants is to pour boiling water over the ant hill. Two or three applications should be sufficient.

Cleaning Jugs

A good way to clean a jug that has a hard dry coating on the inside surface is to put in some fine gravel, a little warm water, and shake vigorously.

Mercurochrome Tints Curtains

If pink curtains become faded and you have no dye handy, try adding a little mercurochrome to the rinse water after washing them. Use the mercurochrome as you would bluing.

Rubber Sponge Used as Clothes Brush

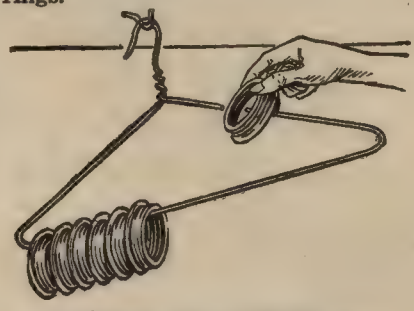
A rubber sponge is useful in brushing hair or lint from clothing.

Making Yellowed Linens White

Table napkins and linen towels that have become yellowed may be made white again by washing and then soaking for 24 hours in a borax and water solution. After soaking, rinse thoroughly and hang linens in the sunshine to dry.

Coat Hanger Holds Jar Rings

If you use glass jar lids of the 2-piece type, a simple rack for holding them is made by cutting a coat hanger as shown and slipping on the rings.



Removing Whitewash from Basement Walls

You will have little difficulty in removing old whitewish from basement walls if you apply a thin coat of a mixture consisting of alum, glue, and starch over the whitewash coating. When this has dried the whitewash will curl up and can be brushed off easily.

Removing Odors From Hands

Rub hands with vinegar or lemon juice to remove the odor of onions or garlic. Remove fish odor by washing hands in a strong solution of salt water, rinse well, and then wash in warm soapy water.

Time-Saving Laundry Hint

To save time and rehandling, try using two clothes baskets when removing clothing from the line. Put the pieces that are ready for use in one basket and the pieces that are to be sprinkled and ironed in the other.

Straightening Curled Rug Corners

If the corner of a rug has a tendency to curl a handy way to straighten it is to dampen the corner with cold water and place books or a heavy object on it to provide pressure while drying. Newspapers should be placed beneath the corner to protect the floor.

Cooking Cauliflower

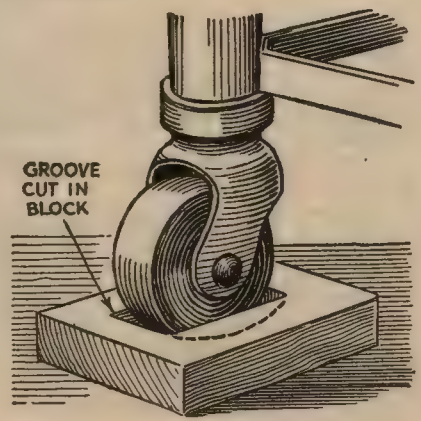
The next time you cook a head of cauliflower try placing a piece of bread on top of the head to absorb the cooking odor. Adding a slice of lemon to the cooking water makes cauliflower whiter. A cup of grated cheese added to white sauce served with cauliflower makes it very tasty.

Cleaning a Panama Hat

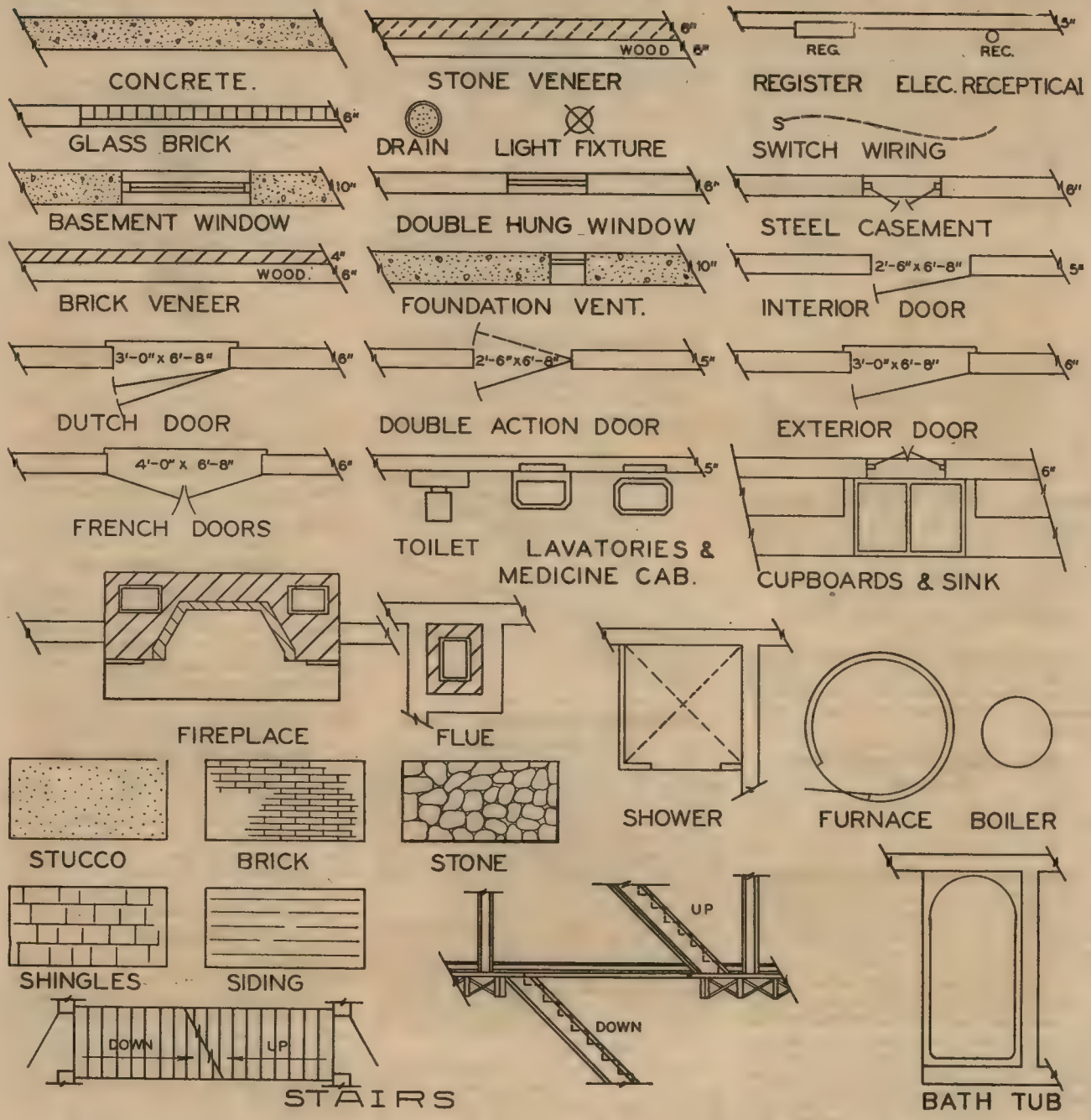
A panama hat may be easily cleaned by using a paste made of gloss starch. Apply a coating of the paste and put the hat in the sun to dry. When dry, both starch and dirt are removed by brushing.

Blocks Prevent Rolling of Machine

Here's a handy kink to prevent your washing machine from jumping or rolling about. Cut four blocks of wood each about one inch thick, and with a chisel make grooves in the blocks large enough to take the casters. Place a block beneath each caster, and the machine will remain stationary.



HOW TO READ HOUSE PLANS



A house plan, usually in the form of a blueprint, is in a sense a picture of the home to be built. It is made up of views such as the front view, rear view and end views. The views are made up of lines which are visible when the building is viewed from various positions; for example, a front view or elevation, consists of the lines which can be seen clearly if you view the structure from the front.

A blueprint shows clearly and distinctly all essential dimensions of a structure and it indicates the surface from which they are taken.

Several types of lines are used in blueprints: Working lines represent the edges of surfaces. Dotted lines indicate a surface that is hidden from sight when the object is viewed from the side shown. Dimension lines are drawn between two working lines to indicate measurements between two points. Section lines, which are parallel lines drawn close together at an angle to working lines, represent what would be seen if a cut were made through the part being shown and a portion removed.

Plans are usually drawn to an accurate scale. By scale we mean that lines on the drawing have an accurate proportion to the line of the work. The scale ⅛th in. to the foot, for example, means that ⅛th in. on the drawing would equal 1 ft. in the structure being erected.

Since it is not practical to show details on a scale blueprint exactly as they would appear on a full-size drawing, symbols, as shown in the accompanying drawing identifying a definite material or structure, are used.

While most of the symbols are self-explanatory there are a couple which the writer feels could stand a little explanation: One is the symbol for stone veneer. In this type construction, a 6 in. wall of stone is used on the outside of a regular frame wall as a covering material. It is not designed to carry weight of the building and is held in place by ties to the framework of the building. The same applies to brick veneer, except that on a brick veneer wall, one width of brick is usually used, which makes a wall facing 4 in. thick.

The showing of a stairs marked "down" on floor plans indicates there is a basement under the house. A stairs marked "up" leads either to second-floor rooms or to attic storage space which is often sufficient to convert into usable rooms.

Specifications which accompany the blueprints, describe in words many things that cannot conveniently be shown on the drawings. This includes information on the quality of material or fixture to be used and how installation is to be made.

RESIDENCE DESIGNS

The following pages contain the photographs and floor plans for 39 different designs of popular and up-to-date homes.

We will send you the complete plans, specifications, lumber and mill lists for any of the designs shown on the following pages, either as shown or reversed, at the prices listed with the designs.

A set of our complete plans includes—

PLANS — Consist of blueprints of all four elevations, basement or foundation and all floor plans and details showing built-in features and intricate parts, all drawn to a scale of not less than one-fourth inch to one foot. Also a plot plan in blank, to be filled in locally.

SPECIFICATIONS — Explain every detail of the construction of the house from the excavation to the interior decorations.

LUMBER AND MILL LISTS — Consist of an itemized list of the lumber and mill materials needed to construct the building and stating where the items should be used.

TO OBTAIN COST ESTIMATES — An estimate of what it would cost to erect any home described in MODERN HOME & GARDENING, in your locality, may be obtained by taking the photo and floor plan of the home from this book, to local builder for estimates.

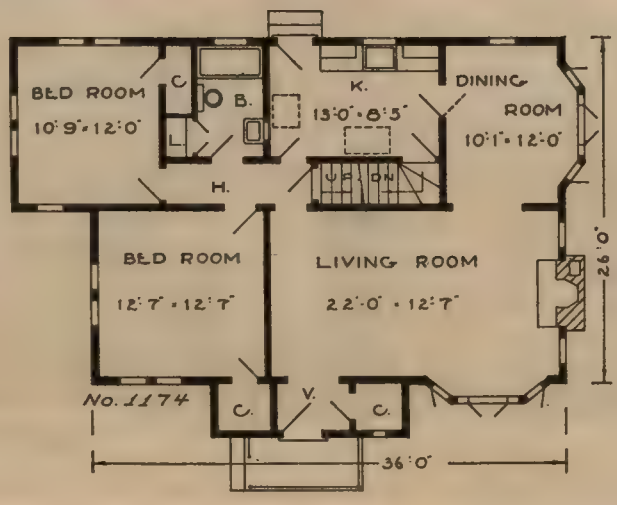
L. F. GARLINGHOUSE COMPANY

115 Eighth Avenue, East **Topeka, Kansas**

No. 1174—The large bay window adds a great deal to the attractiveness of this cottage. The plan shows an excellent arrangement of five lovely rooms, bath and closets. A full basement is provided for this design. The stairs from the hall lead to a large attic.

Complete plans as shown or reversed, specifications, lumber and mill list.....$12.50

Duplicate sets with original order, per set..... 5.00

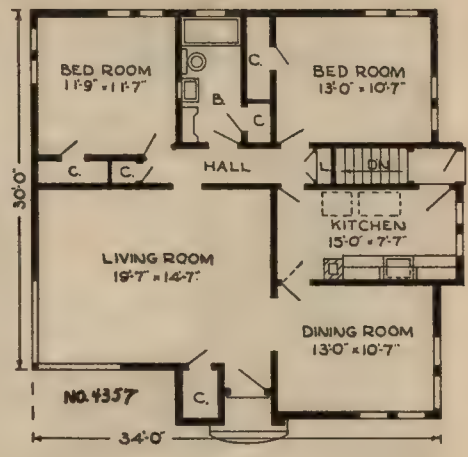


Our complete plans and specifications will save you many times their cost.

Above—No. 4357—Modernistic tendencies mark this attractive cottage. The recessed entrance is in keeping with the design, and is also practical. A new feature of this house is the built-in dressing table in the bath room. An excellent plan is shown by the compact 5-room arrangement.

Complete plans as shown or reversed, specifications, lumber and mill list.....**$15.00**

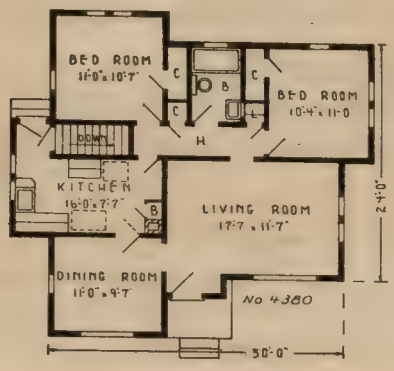
Duplicate sets with original order, per set..... **5.00**

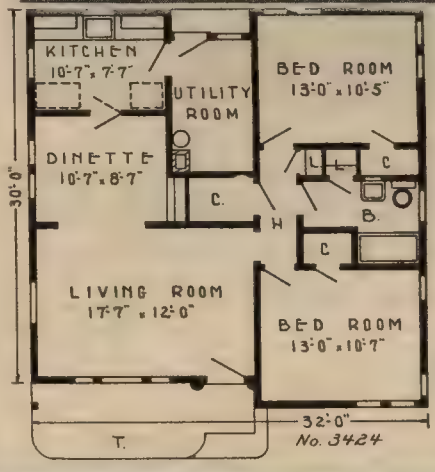


At Left — No. 4380 — Very large windows and Jumbo shingles add to the attractiveness of this cottage. An excellent arrangement of 5 lovely rooms, bath and closets are shown. The stairs from the kitchen lead to a full basement.

Complete plans as shown or reversed, specifications, lumber and mill list.....**$15.00**

Duplicate sets with original order, per set..... **5.00**





At left and above—No. 3424—The beautiful song, "Trees," might well be sung in honor of the friendly guardian of the portals of this lovely cottage. An excellent floor plan is shown, and if a basement is desired, the stairs may be located in the utility room.

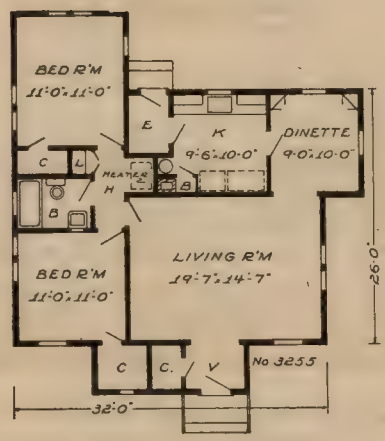
Complete plans as shown or reversed, specifications, lumber and mill list.....**$12.50**

Duplicate sets with original order, per set..... **5.00**

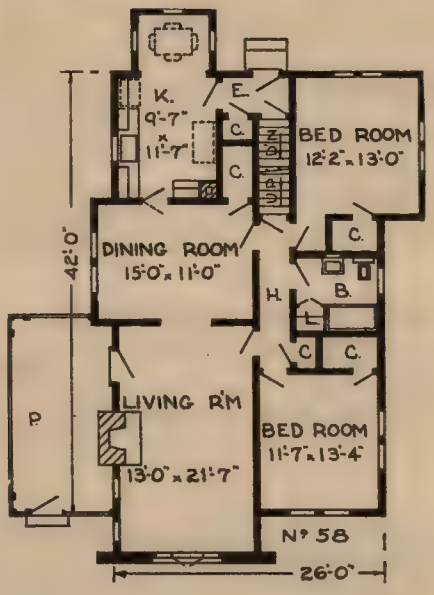
At left and below—No. 3255—A lovely little cottage with a very attractive front entrance. The plan shows an excellent arrangement of rooms, consisting of a large living room, dinette, a compact kitchen, two bed rooms, bath, closets and utility room.

Complete plans as shown or reversed, specifications, lumber and mill list.....**$12.50**

Duplicate sets with original order, per set **5.00**



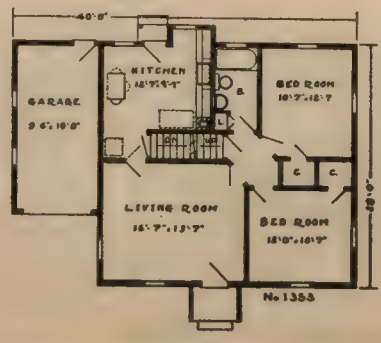
Because owning a Home is probably one of the most important investments you will ever make, it demands careful planning.



At left and above—No. 58—The rock front and large studio window change an otherwise plain exterior into an exceptionally beautiful cottage. The plan of five rooms, bath, closets and breakfast nook is conveniently arranged. The stairs from the hall lead to a large attic.

Complete plans as shown or reversed, specifications, lumber and mill list.....**$15.00**

Duplicate sets with original order, per set..... **5.00**

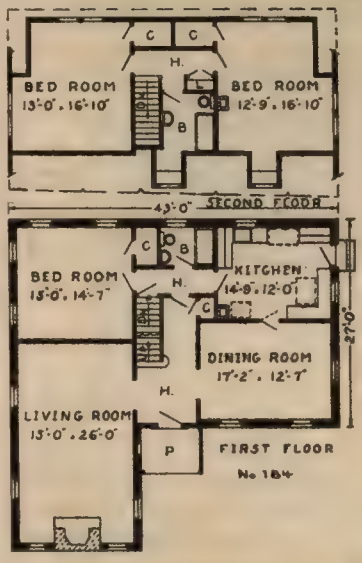


At right—No. 1353—This beautiful little Colonial cottage is quite inexpensive to build, yet it has everything necessary to make it attractive and convenient. Four rooms, bath, closets, and attached garage are shown.

Complete plans as shown or reversed, specifications, lumber and mill list.....**$12.50**

Duplicate sets with original order, per set..... **5.00**

To build a home without a plan or with only hastily drawn sketches is generally costly and unsatisfactory.



Above—No. 184—A beautiful design of Dutch and Colonial descent. The simplicity of the design adds to the homey attractiveness of the exterior. An exceptionally convenient arrangement of rooms is shown. A large recreation room is provided in the basement.

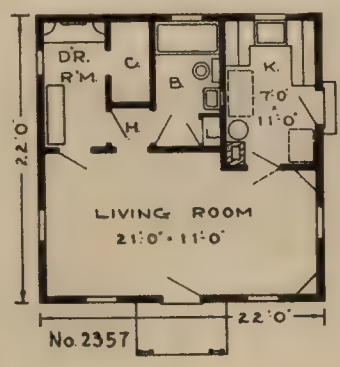
Complete plans as shown or reversed, specifications, lumber and mill list **$20.00**

Duplicate sets with original order, per set..... **5.00**

Below—No. 2357 — This beautiful little two-room cottage has four-room efficiency with the combination living and dining room and the dressing room with disappearing bed.

Complete plans as shown or reversed, specifications, lumber and mill list **$7.50**

Duplicate sets with original order, per set..... **2.50**

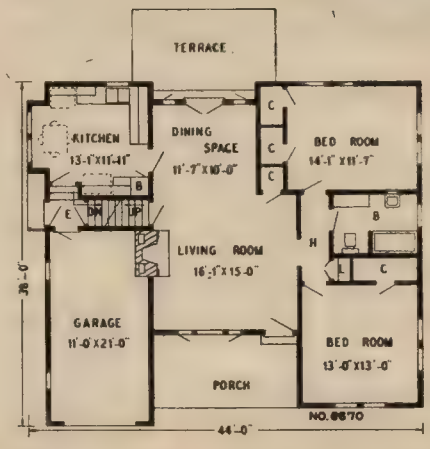


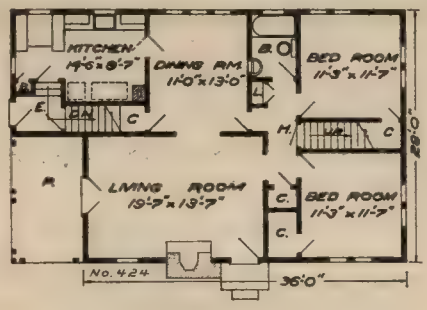
All plan orders are filled promptly.

No. 424—This very attractive cottage has a sided exterior and a beautiful stone fireplace in front. There are five excellent rooms, bath, closets, and breakfast nook shown on the floor plan.

Complete plans as shown or reversed, specifications, lumber and mill list.....**$12.50**

Duplicate sets with original order, per set..... **5.00**





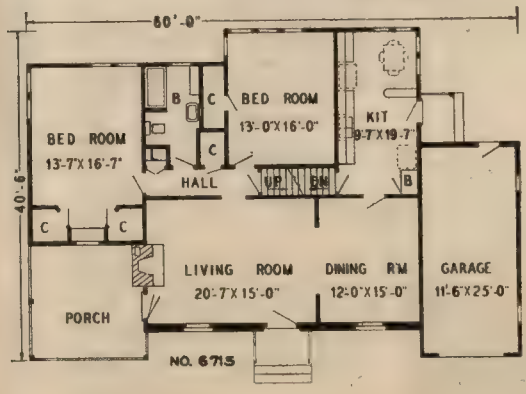
No. 6670—A simple, easily constructed little cottage of five rooms, complete bath with both shower and tub, five closets, porch, terrace and garage, a storage attic is reached by the stairs going up and a full basement with heating, laundry, and storage rooms is reached by the stairs going down. The foundation is concrete and the house is frame with both horizontal and vertical siding for the exterior. The roof may be either wood or composition shingles.

Complete plans as shown or reversed, specifications, lumber and mill list.....**$17.50**

Duplicate sets with original order, per set..... **5.00**

No. 6715—Embedded in trees and with a freshly mown lawn, this beautiful cottage rests to await the eventide. The floor plan shows five lovely rooms compactly arranged, bath with both shower and tub, five closets, an inviting square porch and garage. There is a large attic for storage and in the full basement are recreation, heating and laundry rooms. The foundation is stone and the house is frame with stone veneer across the front and the balance of the house is covered with shingles. The roof may be either wood or composition shingles.

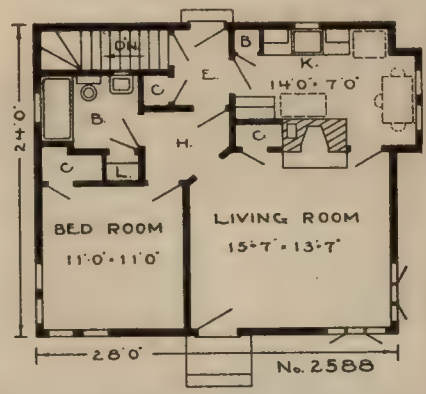
Complete plans as shown or reversed, specifications, lumber and mill list **$17.50**
Duplicate sets with original order, per set **5.00**



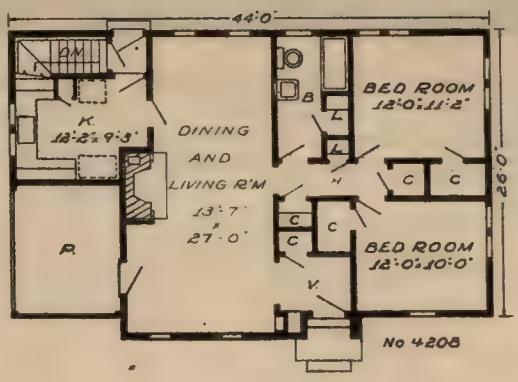
No. 2588—This is quite a smart, up-to-date, little cottage, yet very inexpensive to build. The stairs lead to a full basement, but if not needed, the basement may be omitted and the stair space used for storage.

Complete plans as shown or reversed, specifications, lumber and mill list **$10.00**

Duplicate sets with original order, per set **5.00**



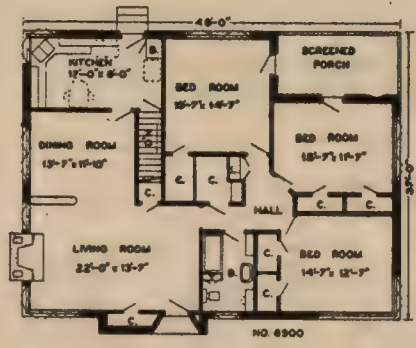
To build without definite plans invites misunderstandings, possibility of costly mistakes and faulty, weak construction.



At left and above—No. 4208—The outstanding feature of this beautiful cottage is the unusually fine combination dining and living room and the convenience of the kitchen. The complete plan shows four lovely rooms, bath, closets, and a full basement.

Complete plans as shown or reversed, specifications, lumber and mill list $15.00

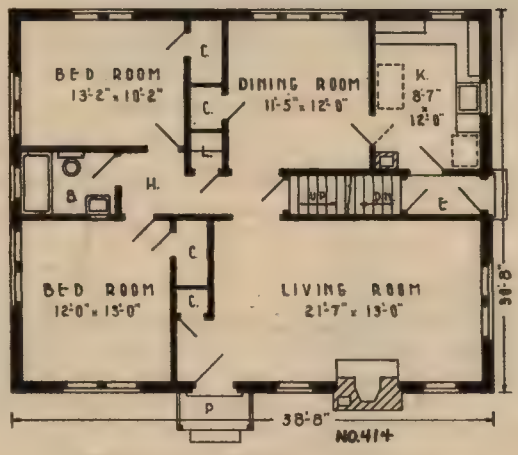
Duplicate sets with original order, per set 5.00



No. 6900—This lovely design borders on the modernistic but is not extreme and is very attractive and practical to build. The plan shows a combination living and dining room divided by a book bar, and four other rooms, complete bath with both tub and shower, nine closets and a screened sleeping porch. The stairs going down from the kitchen lead to recreation, laundry and heating facilities. The foundation is stone and the house is frame with stone veneered exterior. The roof may be wood or composition shingles.

Complete plans as shown or reversed, specifications, lumber and mill list $17.50

Duplicate sets with original order, per set 5.00



Above and at left—No. 414—The square lines of this design make it quite practical and economical to build. The many windows insure plenty of light. A large attic and full basement are provided for by the complete plans.

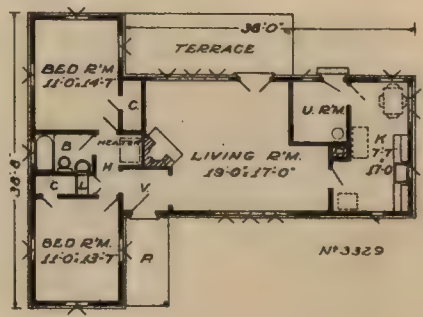
Complete plans as shown or reversed, specifications, lumber and mill list.....**$15.00**

Duplicate sets with original order, per set..... **5.00**

Below and at left—No. 3329—The outstanding feature of this low roofed cottage is the lovely and unusual living and dining room.

Complete plans as shown or reversed, specifications, lumber and mill list.....**$12.50**

Duplicate sets with original order, per set..... **5.00**

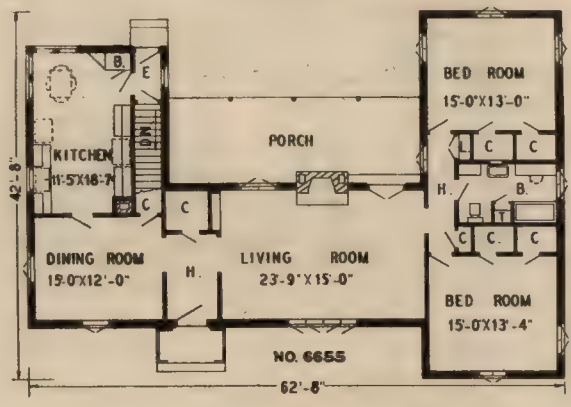


Select a design that is in harmony with other homes in your neighborhood.

No. 6655—This very beautiful cottage has a distinct individuality not always attained where simplicity rules. The floor plan shows a wonderful arrangement consisting of an entrance hall, a large living room, dining room, kitchen with breakfast corner, two large bed rooms, a complete bath with both shower and tub, dressing table and towel cabinet, eight closets and a large porch in the rear. A full basement is provided for this plan with recreation room, laundry and heating rooms, or the house may be built without the basement, but with a utility room where the basement stairs and a portion of the porch is shown. The foundation is concrete and the construction of the house is frame with painted brick for the exterior. The roof may be either wood or composition shingles.

Complete plans as shown or reversed, specifications, lumber and mill list.....$20.00

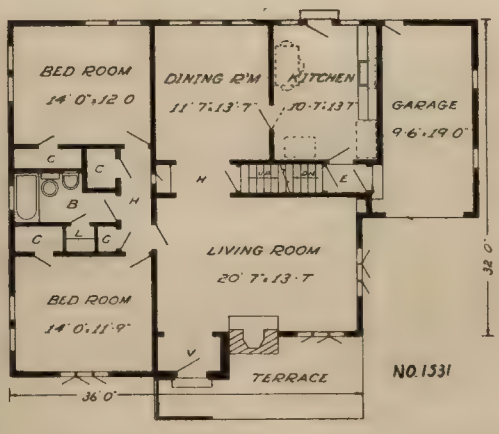
Duplicate sets with original order, per set.....5.00



Below—No. 1531—This is one of our loveliest and most practical small cottages. The several materials used for the exterior are happily combined to make this a picturesque design. Five rooms, bath, closets, and garage are shown by the floor plan.

Complete plans as shown or reversed, specifications, lumber and mill list.....$15.00

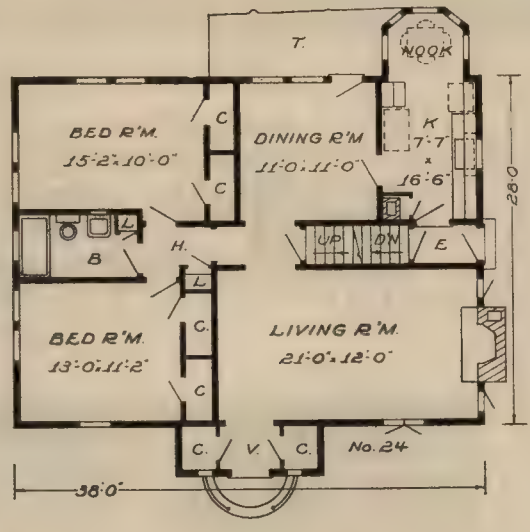
Duplicate sets with original order, per set.....5.00



Above—No. 24—A charming little home that appeals to one's urge for beauty, economy and convenience. This lovely little home has every requisite for small home living. Five large rooms, bath, many closets, attic and full basement with a recreation room are shown by the complete plans.

Complete plans as shown or reversed, specifications, lumber and mill list.....$15.00

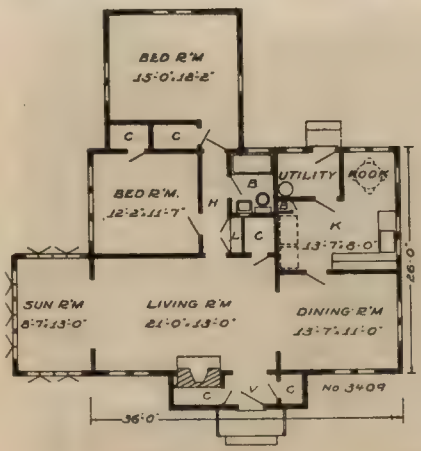
Duplicate sets with original order, per set..... 5.00

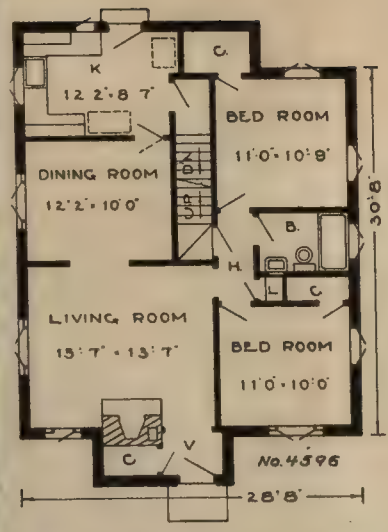


Below — No. 3409 — One of the most beautiful of our cottage designs. An excellent plan arrangement of six lovely rooms, bath, closets and utility room is shown. If not needed, the rear bed room may be omitted. The exterior will be quite as attractive if the front entrance is sided instead of stuccoed.

Complete plans as shown or reversed, specifications lumber and mill list.....$15.00

Duplicate sets with original order, per set..... 5.00

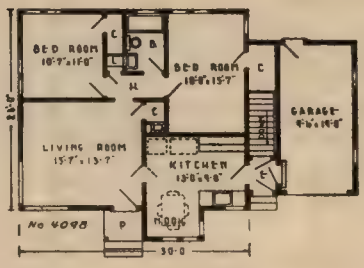




No. 4596—Concrete blocks were used for the construction of this lovely cottage but it may be easily built of frame and covered with siding or brick veneer, if preferred. The plan is very compact and conveniently arranged.

Complete plans as shown or reversed, specifications, lumber and mill list **$12.50**

Duplicate sets with original order, per set..... **5.00**



At left and Below—No. 4098—Shingles are used for the exterior of this delightful cottage. Here we offer you 4 rooms, bath and closets with 5-room efficiency. The garage is conveniently connected, but may be omitted, if your lot is too narrow to allow it.

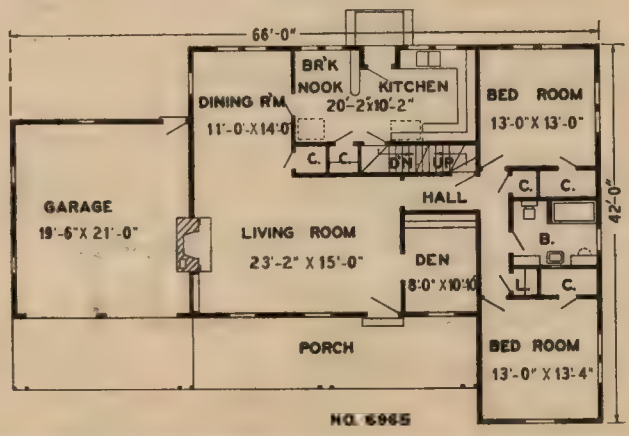
Complete plans as shown or reversed, specifications, lumber and mill list **$15.00**

Duplicate sets with original order, per set..... **5.00**

No. 6965 — This beautiful ranch type cottage has a perfect setting to bring out its best features. The floor plan shows five excellent rooms, a small den, a bath room with both tub and shower, six closets, a large porch and double garage. The stairs going up from the hall lead to low attic storage and the stairs going down from the kitchen lead to a full basement with recreation, storage, heating and laundry rooms. The foundation is concrete and the house is frame with a combination of vertical and horizontal siding for the exterior. The roof may be either wood or composition shingles.

Complete plans as shown or reversed, specifications, lumber and mill list.....$20.00

Duplicate sets with original order, per set..... 5.00

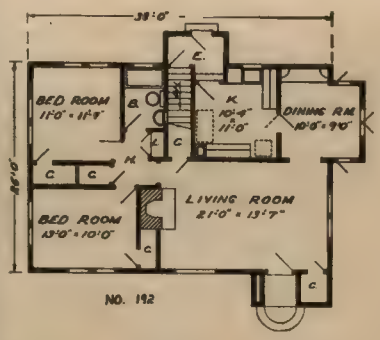


NO. 6965

Below—No. 192—A lovely little cottage with a large studio window. Five splendid, well-arranged rooms, bath and closets make up this excellent floor plan. A full basement is reached by the stairs from the entry.

Complete plans as shown or reversed, specifications, lumber and mill list.....$12.50

Duplicate sets with original order, per set..... 5.00



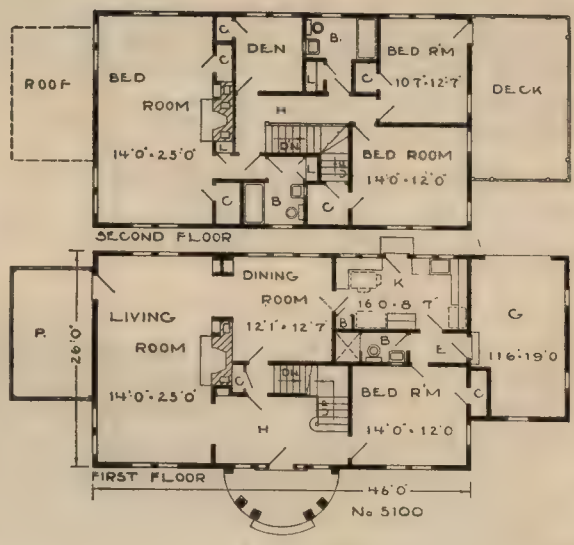
NO. 192

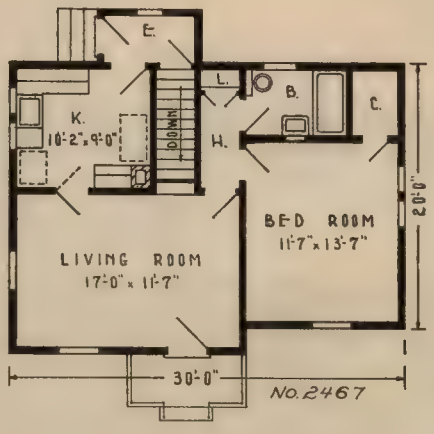
In using Garlinghouse plans, guesswork is eliminated and chance of construction errors is reduced to a minimum.

Above—No. 5100—This is one of the loveliest of our Colonial homes. The entrance is impressive and dignified, yet there is an air of warmth and friendliness that invites one to enter and enjoy the spacious rooms.

Complete plans as shown or reversed, specifications, lumber and mill list.....**$20.00**

Duplicate sets with original order, per set..... **5.00**





At right—No. 2467—This beautiful little Early American cottage has an excellent arrangement of three rooms, bath and closets. The stairs lead to a full basement.

Complete plans as shown or reversed, specifications, lumber and mill list.....**$10.00**

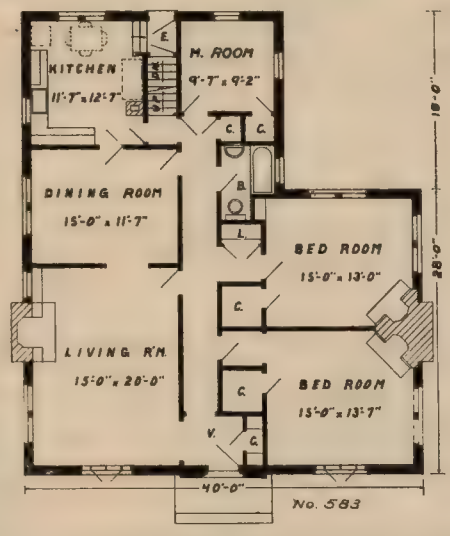
Duplicate sets with original order, per set..... **5.00**

ORDER PLANS FROM
L. F. GARLINGHOUSE COMPANY
Topeka, Kansas

No. 583—The charm, grace and dignity of Colonial days, together with the practical modern touch, make this an extremely beautiful home, both restful and convenient. The plan shows six well arranged rooms.

Complete plans as shown or reversed, specifications, lumber and mill list.....**$15.00**

Duplicate sets with original order, per set..... **5.00**



Below—No. 1347—This beautiful little cottage may be built with the side to the street as shown here or with the end fronting the street. The plan consists of a splendid living room, two lovely bed rooms, a small dining room with built-in buffet, bath, large closets and kitchen. The stairs from the hall lead to a fine large attic.

Complete plans as shown or reversed, specifications, lumber and mill list.....**$12.50**

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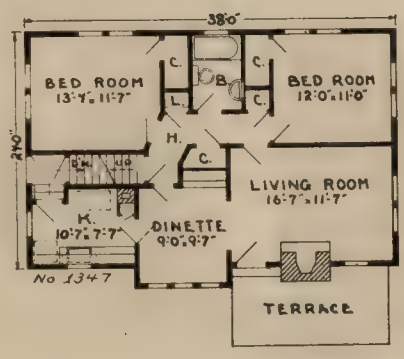
Minor alterations in design and material substitutions can be handled by any competent builder, without going to the expense of making up special plans.



No. 430 — Quite up-to-date is this very beautiful sunny cottage with its large solarium and many windows in all rooms. It will be a joy to prepare meals and to serve them in the lovely and conveniently arranged kitchen shown here.

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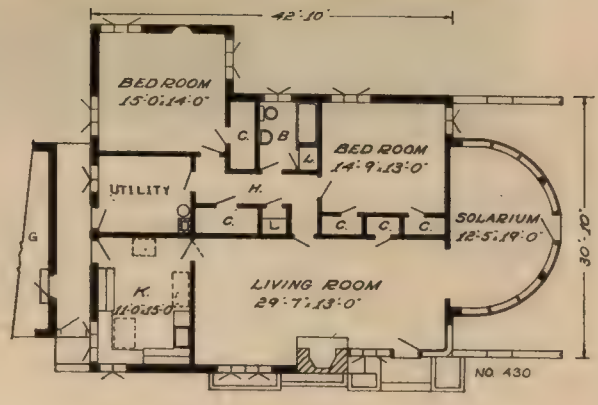

Below—No. 2136—A charming little cottage of four rooms, bath and closets. This design is especially suitable for a summer cottage, but may be built for a permanent home, if desired.

Complete plans as shown or reversed, specifications, lumber and mill list..... **$12.50**

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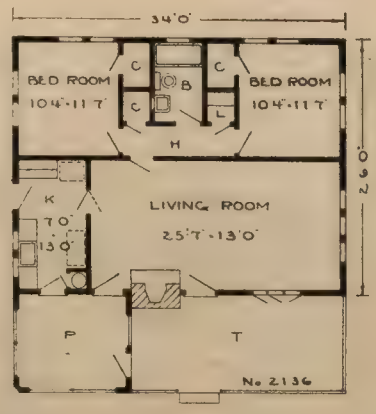

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Topeka, Kansas

No. 6760—Just a bright little cottage with big rooms. The floor plan shows five rooms, large complete bath room with both shower and tub, a lavatory, dressing table and towel closet. Six closets, a porch and a large terrace reached by a Dutch door from the living room. The basement stairs lead to a large recreation room, storage room, laundry and heating facilities. The foundation is concrete and the house is frame with a combination of horizontal and vertical siding on the exterior. The roof may be either wood or composition shingles.

Complete plans as shown or reversed, specifications, lumber and mill list.....$17.50

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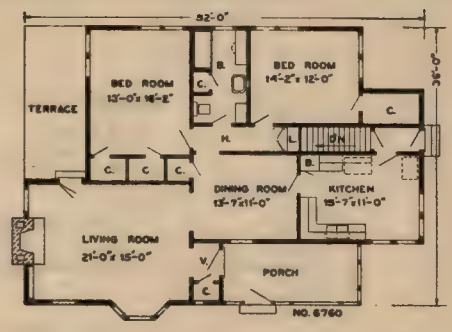

No. 1000 — This little cottage has plain simple lines and an especially attractive entrance. Five compact rooms, bath and closets are shown.

Complete plans as shown or reversed, specifications, lumber and mill list $12.50

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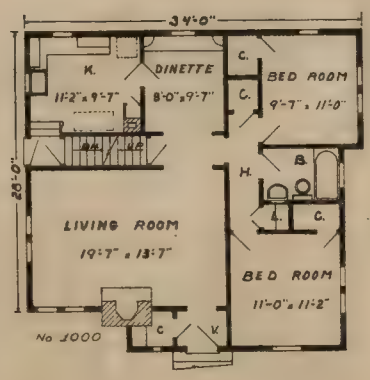

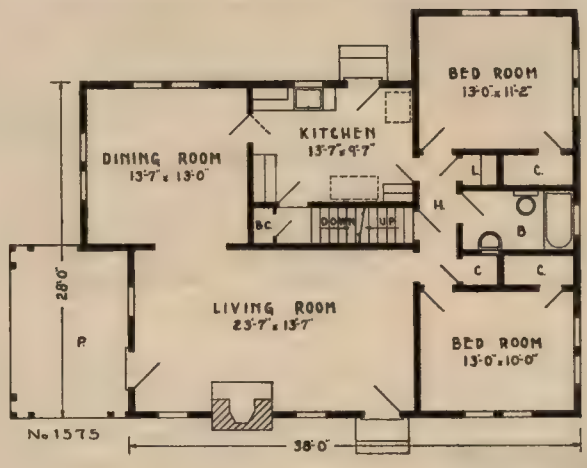

In using Garlinghouse plans, the chance of costly errors is reduced to a minimum.

Above—No. 1575 — A lovely little cottage with irregular shingles on the exterior. The plan shows an excellent arrangement of five splendid rooms, bath and closets. A full basement and a large attic are reached by the stairways.

Complete plans as shown or reversed, specifications, lumber and mill list.....**$12.50**

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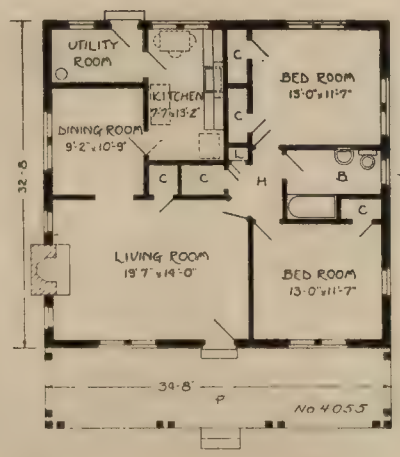
No. 4055—A very popular type of Colonial cottage with a spacious porch, affording much enjoyment and comfort to the occupants. This design is shown in brick veneer but a sided or shingled exterior will be quite as attractive. An excellent plan arrangement is shown.

Complete plans as shown or reversed, specifications, lumber and mill list.....**$12.50**

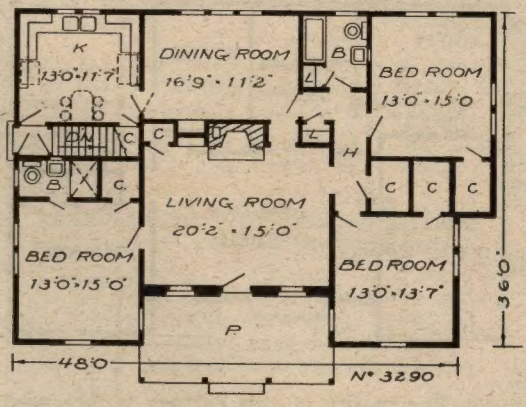
Duplicate sets with original order, per set..... **5.00**

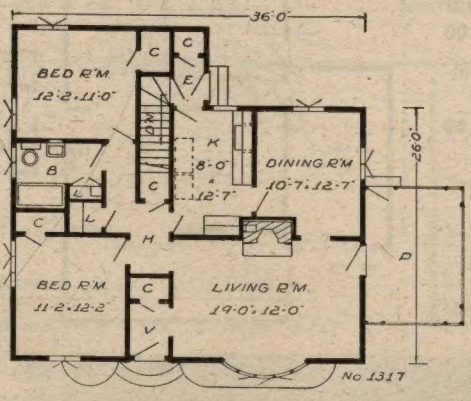


At right and above—No. 3290—We chose this setting because of the sprangley trees in front and the wonderful view of a little valley; then, we built the wide porch and large windows so that we might feast our eyes on the lovely landscape and enjoy the cool fresh air of our hill top. Our kitchen is indeed prizeworthy; with everything within reach, housework is a pleasure.

Complete plans as shown or reversed, specifications, lumber and mill list..... **$15.00**

Duplicate sets with original order, per set..... **5.00**

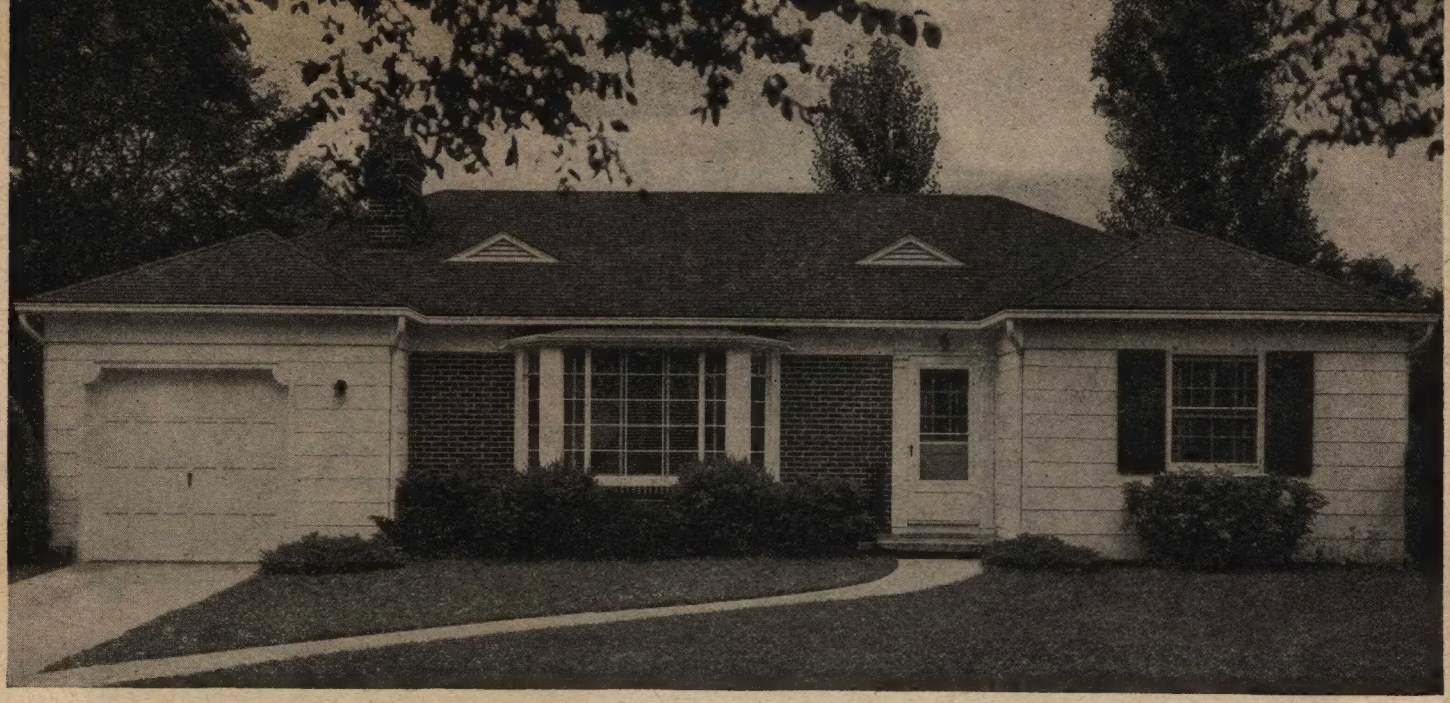


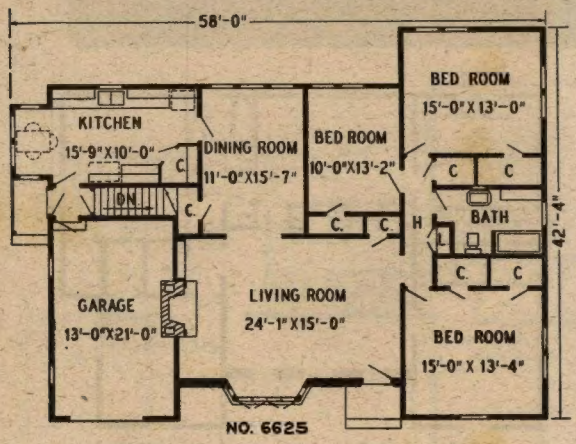


No. 1317 — This beautiful little cottage is quite modern and up-to-date. Five rooms, bath, closets, a large screened porch, and a full basement with a recreation room, are provided by the complete plans.

Complete plans as shown or reversed, specifications, lumber and mill list..... **$15.00**

Duplicate sets with original order, per set..... **5.00**



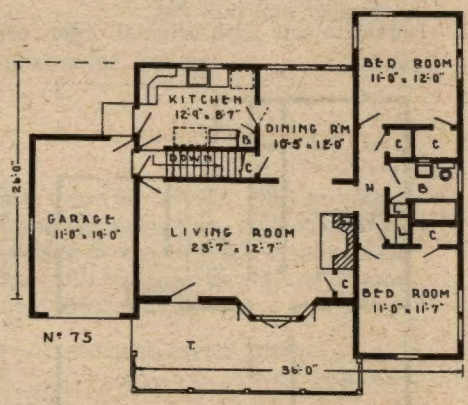


NO. 6625

Above—No. 6625—This lovely cottage is quite simple yet outstanding in design. The plan shows six fine rooms, a complete bath with both tub and shower, eight closets and a garage. There is a basement under the entire house with a recreation room and facilities for both heating and laundry. We specify the foundation to be of concrete and the house is constructed of frame with a beautiful combination of siding and brick for the exterior. The roof may be either wood or composition shingles.

Complete plans as shown or reversed, specifications, lumber and mill list **$20.00**

Duplicate sets with original order, per set **5.00**



N° 75

No. 75—The beauty of this cottage is increased by the long low roof lines and the fence around the terrace. The stone veneer and bay window add to the attractiveness of the exterior. An excellent plan is shown with the garage attached.

Complete plans as shown or reversed, specifications, lumber and mill list **$15.00**

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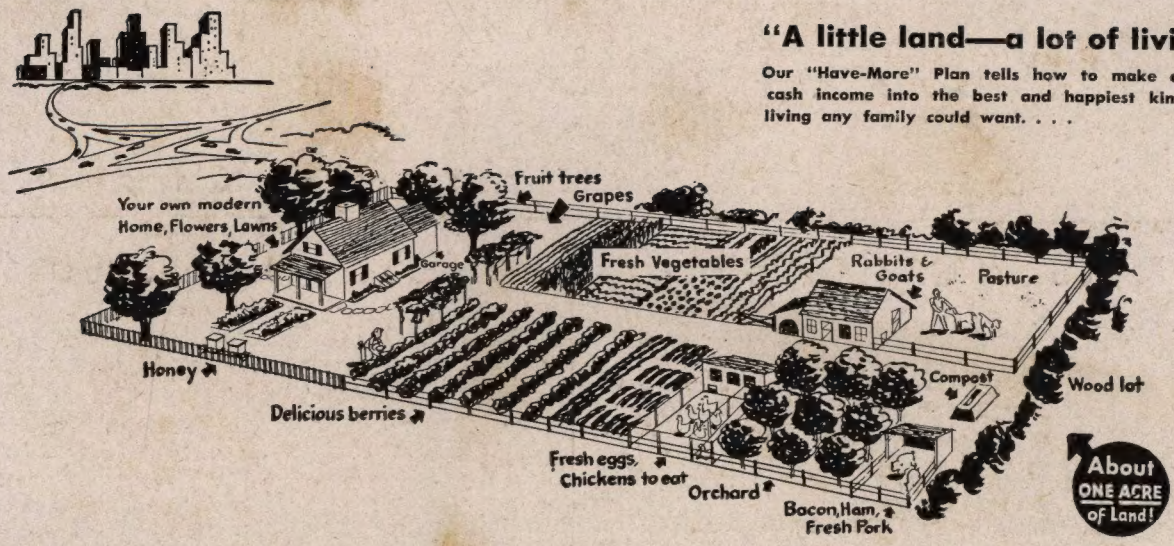

"This is the way I want to live— *the rest of my life!*"

Mrs. Robinson, Jackie and I just want to tell you how we've learned to have more happiness, more living and more security than 99% of this world's families have ever had!

I guess this sounds boastful, but I don't mean it so. It is just the enthusiasm we have for the Plan we've worked out. We call it our "Have-More" Plan because that's how it works for us . . . we're having more of just about everything that makes life worth living!

Our "Have-More" Plan is the true story of how we Robinsons moved from the city four years ago to our 2-acre place in the nearby country to find "a little land and a lot more living" while I kept a full-time job in town.

It tells how we grow most of our family's food in spare time—have fun doing it—have better living—more sunshine and fresh air—more peace and quiet—more security and independence—**more** of just about everything!

All the Details

Our "Have-More" Plan contains over 50,000 words, 73 illustrations, many actual photographs of our own place. And I've kept the price as low as I possibly could, only $1.00 postpaid.

It tells just how we do everything—all our short-cuts, ideas, labor-saving methods—how it takes us only an hour or so of spare time a day to have tender chicken to eat, plenty of really fresh eggs, a wonderful garden with a lot less work, delicious rabbit meat, rich milk, butter, cream from our miniature dairy, tasty ham, pork, bacon, sausage, geese, turkeys, squab, spring lamb, honey bees, fruit trees instead of shade trees, luscious grapes, raspberries, strawberries, etc.—how we use the latest, easiest preserving methods, including quick freezing.

Are You Planning a New Home?

If you are planning to build, remodel or buy a home, I can't urge you too strongly to send for a copy of our Plan—it can save you hundreds of dollars, many costly mistakes! Our Plan shows you that the ordinary "house and lot" is as out of date as the horse and buggy. Shows you just how to go about finding a place like ours with an acre or so of land, how to choose the right location, how to save money in spite of today's high building costs, how to get started now, how to lay your place out, how your house should be specially planned for productive country living, how to finance your place on a small amount of cash! Dozens of other things you'll be thankful to know about.

No "Magic" About It

Now, please don't get me wrong. This is no "crack-pot theory" on how to make an easy living! I suppose that if you absolutely had to, you could live a long time entirely off a small place like our two acres. But that would be just existing, not really living.

You've got to have some cash income—from a job or a pension or a small business of your own. What I'm saying is that with my "Have-More" Plan you can make a small cash income into the best and happiest kind of a living any family could want. That's WHY we call it our "Have-MORE" Plan.

Will You Join Us?

A friend said, the other day, "Ed, why do you bother with other people? Why don't you settle down and just enjoy your own job and your 'Have-More' Homestead? Why try to spread it all over the country?" I may sound silly trying to tell you why. This is my job now. I am putting full time into gathering information on country living . . . for ourselves and others. I feel, somehow, that right now the U. S. needs all the help it can get toward happiness and peace and security.

I've got a boy I want to see grow up in a good country, and if ten or twenty million American families can get set the way the Robinson family is, I don't think anything can hurt this nation very much . . . not even atomic bombs!

Do you see what I mean? That's why I've worked so hard putting this Plan together. That's why I was so careful to be truthful and sensible about everything we put in it. And that's why I've kept the price as low as I possibly could—only $1.00 postpaid.

Now It's Up to You!

So if you are one of our kind of people, if you would like to have the happiness and security of a little place in the country like ours, just fill in the coupon here and send it to me.

When you get your Plan—by return mail—look it over. If you are disappointed in any way, if you don't agree it's the biggest dollar's worth you ever saw in your life, put it right back in the package and return it to me. I'll send you your dollar back and a dime for your postage.

On the other hand, if you like it, and I'm sure you will, help me by showing it to your friends and getting them to start planning a "Have-More" Homestead also.

Yours for "a little land and a lot of living."

NOW is an excellent time to get started!

Ed Robinson

P. O. Box 5606, Noroton, Conn.

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P. O. Box 5606, Noroton, Conn.

Dear Ed: Here's your dollar. I want to see your "Have-More" Plan. If it's what I want I'll keep it. If not, I'll send it back and you're to return my money—and we'll still be friends.

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